



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION 5
 77 WEST JACKSON BOULEVARD
 CHICAGO, IL 60604-3590

FEB 27 2017

REPLY TO THE ATTENTION OF:

SR-6J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

7016 1370 0001 5720 1056
 Katherine L. Adams
 Sr. Vice President and General
 Counsel
 Honeywell International Inc.
 115 Tabor Road
 Morris Plains, NJ 07950

RE: General Notice of Potential Liability for the Gary Development Landfill Site located at
479 Cline Avenue, Gary, Lake County, Indiana, CERCLIS ID No: IND077005916.

Dear Sir or Madam:

The United States Environmental Protection Agency (U.S. EPA) has documented the release or threat of release of hazardous substances, pollutants or contaminants into the environment from the above-referenced facility, and is planning to spend public funds to investigate and control these releases. This action will be taken by U.S. EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 *et seq.* (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613 (1986) (SARA), unless U.S. EPA determines that such action will be done properly by a responsible party or parties. Responsible parties under CERCLA include the current and former owners and operators of the facility, persons who generated the hazardous substances, and persons who were involved in the transport, treatment, or disposal of the hazardous substances at the facility. Under Section 107(a) of CERCLA, where U.S. EPA uses public funds towards the cleanup of the hazardous substances, responsible parties are liable for all costs associated with the removal or remedial action and all other necessary costs incurred in cleaning up the facility, including investigation, planning, and enforcement costs.

On February 25, 2013, U.S. EPA issued Special Notice to eleven potentially responsible parties (PRPs) previously identified with the Gary Development Landfill Site (Site). A copy of the Special Notice letter, as well as the Administrative Order on Consent (AOC) and Statement of Work that resulted from the ensuing negotiations, is enclosed with this letter. You are invited to enter into negotiations with the PRPs who signed the AOC to conduct the ongoing remedial investigation and feasibility study. An updated service list with contact information for other PRPs is also enclosed.

U.S. EPA has received information that you or your organization may own, or may have owned or operated the facility or generated or transported hazardous substances that were disposed of at the facility. A copy of your Site nexus document is enclosed.

By this letter, U.S. EPA notifies you of your potential liability with regard to this matter and encourages you, as a potentially responsible party, to agree to reimburse U.S. EPA for costs incurred to date and to voluntarily perform or finance the response activities which U.S. EPA has determined or will determine are required at the facility. The cost of the response actions performed at the Site to date through U.S. EPA funding is approximately \$897,495.78, plus any and all interest recoverable under Section 107(a) or under any other provisions of the law. A copy of the Itemized Cost Summary dated February 14, 2017 is enclosed.

As a potentially responsible party, you should notify U.S. EPA in writing within seven (7) days after receipt of this letter of your willingness to participate in the ongoing negotiations with the other PRPs. Your response should be sent to:

Leslie Blake, Remedial Project Manager
U.S. Environmental Protection Agency -- Region 5
Superfund Division (SR-6J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
Phone: (312) 353-7921

If U.S. EPA does not receive a timely response, U.S. EPA will assume that you or your organization does not wish to negotiate a resolution of your/its potential responsibility in connection with the facility and that you or your organization has declined any involvement in performing the response activities.

Your response should indicate the appropriate name, address, and telephone number for further contact with you. If you are already involved in discussions with State or local authorities or involved in a lawsuit regarding this facility, you may continue such activities as you see fit. This letter is not intended to advise you or direct you presently to restrict or discontinue any such activities already underway; however, you are advised to report the status of those discussions or actions in your response to this letter and to provide a copy of your response to any other parties involved in those discussions or actions.

If you have any questions regarding the technical aspects of this letter, please contact Leslie Blake, Remedial Project Manager, at (312) 353-7921, email blake.leslie@epa.gov. If you have an attorney handling your legal matters, please direct his or her questions to Jeffrey Cahn, Associate Regional Counsel, at (312) 886-6670, e-mail cahn.jeff@epa.gov.

Due to the nature of the problem at this facility and the attendant legal ramifications, U.S. EPA strongly encourages you to submit a written response within the time frame specified herein. We hope you will give this matter your immediate attention.

My staff and I look forward to working with you during the coming months.

Sincerely,



Joan Tanaka, Chief
Remedial Response Branch #1

cc: David L. Rieser
Gary Development Landfill PRP Group Common Counsel
K&L Gates
70 West Madison Street, Suite 3100
Chicago, IL 60602-4207

cc: Updated PRP Service List

Enclosures: 1. Updated PRP service list
2. Special Notice letter
3. Administrative Order on Consent
4. Statement of Work
5. SBREFA Fact Sheet
6. Itemized Cost Summary
7. Site-nexus document

Enclosure 1

Updated PRP Service List

**Gary Development Landfill Site
General Notice PRP List 02/22/17**

1. American Cyanamid

Douglas M. Lankler
Executive Vice President and General Counsel
Pfizer, Inc.
235 East 42nd Street
New York, NY 10017

cc: David R. Erickson
Shook, Hardy & Bacon L.L.P.
2555 Grand Blvd.
Kansas City, MO 64108

2. American Recovery

Joshua Gindin
Executive, Vice President, General Counsel
and Secretary
Expert Global Solutions, Inc.
507 Prudential Road
Horsham, PA 19044

3. Baron-Blakeslee Co.

Katherine L. Adams
Sr. Vice President and General Counsel
Honeywell International Inc.
115 Tabor Road
Morris Plains, NJ 07950

cc: Laura Cottingham
Arnold & Porter Kaye Scholer LLP
601 Massachusetts Ave., NW
Washington, DC 20001-3743

4. Benjamin Moore & Company

Michael M. Searles
CEO and President
Benjamin Moore & Company
101 Paragon Drive
Montvale, NJ 07645
cc: Paul Sangillo

Deputy General Counsel
Corporate & EHSS
Benjamin Moore & Co.
101 Paragon Drive
Montvale NJ 07645

cc: Daniele Cervino
Beattie Padovano, LLC
50 Chestnut Ridge Road
Suite 208
Montvale, NJ 07645-0244

5. Certain-Teed Corporation

John Crowe
President and CEO
Certain-Teed Corporation
20 Moores Road
Malvern, PA 1935

cc: Lauren P. Alterman
Vice President, Environment, Health and Safety
Saint-Gobain Corporation
20 Moores Road
Malvern, PA 19355

6. Cities Service Company

Edoardo Orsoni
Vice President Legal Affairs
CITGO Petroleum Corporation
1293 Eldridge Parkway
Houston, TX 77077-1670

7. Keiln Chemical

Mark H. Duesenberg
Vice President, General Counsel, and Secretary
Ferro Corporation
6060 Parkland Boulevard
Suite 250
Mayfield, OH 44124

8. Korellis Roofing

Pete Korellis
President
Korellis Roofing, Inc.
1333 169th Street
Hammond, IN 46324

9. LaSalle Steel Company

Thad Florence
General Counsel
Optima Specialty Steel, Inc.
200 S. Biscayne Blvd., Suite 5500
Miami, FL 33131-2310

Niagara LaSalle Corporation
1412 150th Street
Hammond, IN 46327

10. M&T Chemical Company

Richard P. Rowe
President and CEO
Arkema Inc.
900 First Avenue
King of Prussia, PA 19406

11. Munster Med and Munster Med-Inn

John M. Horner
President & CEO
Major Hospital/Major Health Partners
150 West Washington Street
Shelbyville, IN 46176

cc: Cynthia A. Bedrick
McNeely Stephenson
2150 Intelliplex Drive
Suite 100
Shelbyville, IN 46176

12. NIPSCO

Carrie J. Hightman
Executive Vice President and Chief Legal Officer
NiSource Inc.
801 East 86th Avenue
Merrillville, IN 46410

Daniel J. Deeb
Shiff Hardin LLP
233 South Wacker Drive
Suite 6600
Chicago, IL 60606

13. Staley Chemical

Lori Donley
Subsidiary CEO
Tate & Lyle Ingredients Americas LLC
2200 East Eldorado Street
Decatur, IL 62525

cc: Heidi R. Balsley
Corporate Counsel
Tate & Lyle
5450 Prairie Stone Parkway
Hoffman Estates, IL 60192

14. Standard Steel Specialty Company

Robert Conley
President and CEO
Standard Steel Specialty Company
100 Jameson Street
Beaver Falls, PA 1501

15. Texaco Pipe Line

R. Hewitt Pate
Vice President and General Counsel
Chevron Corporation
6001 Bollinger Canyon Road
San Ramon, CA 94583-2324

16. Thermark

Susan C. Miller
Senior Vice President, General Counsel, and Secretary
Avery Dennison Corporation
207 Goode Avenue
Glendale, CA 91203

cc: Nancy Wilms
Edgcomb Law Group, LLP
333 North Glenoaks Blvd., Ste. 610
Burbank, CA 91502

17. Wm. Pozzo Inc.

Judson Salmon
President
Pozzo Truck Center, Inc.
3001 E. 15th Place
Gary, IN 46403

cc: Gerald M. Bishop, Esq.
Law Offices of Gerald M. Bishop & Associates
2115 W. Lincoln Hwy
Merrillville, IN 46410

Enclosure 2

Special Notice Letter



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

FEB 25 2013

REPLY TO THE ATTENTION OF:

SR-6J

URGENT LEGAL MATTER ---
PROMPT REPLY NECESSARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

[ADDRESS LABEL]

Re: Special Notice Letter for the Gary Development Landfill Site located at 479 Cline Avenue, Gary, Lake County, Indiana, CERCLIS ID No: IND077005916.

Dear Sir or Madam:

The United States Environmental Protection Agency ("U.S. EPA") has undertaken response actions at the above referenced Site pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §9601 *et seq.*, as amended ("CERCLA"). These response actions include taking and analyzing samples at and near the Site. U.S. EPA has documented the release or threatened release of hazardous substances, pollutants, and contaminants at or from the Site. U.S. EPA believes the following response activities are necessary at the Site: 1) a remedial investigation ("RI") to determine the nature and extent of the contamination at the Site; and 2) a feasibility study to determine and evaluate alternatives for remedial action at the Site ("FS").

You have been identified as a contact for the Potentially Responsible Party identified on the attached service list. This letter notifies you that a 60 day period of formal negotiations with the U.S. EPA automatically begins with this letter whereby you and other Potentially Responsible Parties are invited to enter into negotiations with U.S. EPA to conduct the RI and FS at the Site. This letter also contains a formal demand for reimbursement of costs that have been incurred at this Site by the U.S. EPA in response to the health and environmental concerns at the Site. This

letter also provides general and site-specific information to assist you in these negotiations.

NOTICE OF POTENTIAL LIABILITY

U.S. EPA has information indicating that you may be a Potentially Responsible Party ("PRP") under Section 107 of CERCLA, with respect to this Site. Under Section 107 of CERCLA, responsible parties include current owners and operators of the Site and former owners and operators of the Site at the time of disposal of hazardous substances, as well as persons who owned or possessed hazardous substances and arranged for disposal, treatment, or transportation of such hazardous substances and persons who accepted hazardous substances for transportation for disposal or treatment to the Site selected by such transporter.

U.S. EPA may perform response actions in response to a release or threatened release of hazardous substances, pollutants or contaminants pursuant to Section 104 of CERCLA. Under Section 107 of CERCLA, U.S. EPA can recover those response costs from responsible parties. Under Sections 106(a) and 107(a) of CERCLA, 42 U.S.C. §§ 9606(a) and 9607(a), Section 7003 of the Resource Conservation and Recovery Act, 42 U.S.C. § 6973, as amended (RCRA), and other laws, U.S. EPA can order, or ask a court to order, responsible parties, to conduct response actions at a site. Failure to comply with an administrative order issued under Section 106(a) of CERCLA may result in a fine of up to \$25,000 per day (adjusted for inflation), under Section 106(b) of CERCLA, or imposition of treble damages, under Section 107(c)(3) of CERCLA. In addition, responsible parties may be liable for damages to natural resources at a Site.

SPECIAL NOTICE AND NEGOTIATION MORATORIUM

Under Section 122 of CERCLA and general settlement authority, U.S. EPA can enter into settlement agreements with PRPs that require PRPs to conduct response actions under Section 104 of CERCLA. U.S. EPA has determined that use of the Section 122(e) special notice procedures specified in CERCLA may facilitate a settlement between U.S. EPA and PRPs for this Site. Therefore, under Section 122 of CERCLA, this letter triggers a 60-day moratorium on certain U.S. EPA response activities at the Site. During this 60-day period, the PRPs, including you, are invited to participate in formal negotiations with U.S. EPA. You are also encouraged to voluntarily negotiate a settlement providing for the PRPs, including yourself, to conduct or finance the response activities required at the Site. The 60-day negotiation period ends sixty days after the date of this letter. The 60-day negotiation moratorium will be extended for an additional 30 days if PRPs provide U.S. EPA with a good faith offer to conduct or finance the Remedial Investigation/Feasibility Study (RI/FS), on or before 60 days after the date of this letter. If U.S. EPA determines that the PRPs have submitted a good faith offer, U.S. EPA will extend negotiations until 90 days after the date of this letter. If settlement is reached between U.S. EPA and the PRPs, the settlement will be embodied in an administrative order on consent for RI/FS.

FUTURE RESPONSE ACTIONS

U.S. EPA plans to conduct the following CERCLA activities at the Site:

1. Remedial Investigation/Feasibility Study beginning on or about 60 days after the date of this letter.

WORK PLAN AND DRAFT CONSENT ORDER

A copy of U.S. EPA's draft administrative order on consent ("AOC") and statement of work ("SOW") are attached. This is provided to assist you and other PRPs in developing a good faith offer for conducting the RI/FS.

GOOD FAITH OFFER

As indicated, the 60-day negotiation moratorium triggered by this letter may be extended for 30 days if the PRPs submit a good faith offer to U.S. EPA. An offer to conduct or finance the RI/FS must include a written proposal that demonstrates the PRPs' qualifications and willingness to conduct or finance the RI/FS and must include the following elements:

1. A statement of willingness by the PRPs to conduct or finance the RI/FS which is consistent with U.S. EPA's statement of work and draft administrative order and provides a sufficient basis for further negotiations.
2. A demonstration of the PRPs technical capability to carry out the RI/FS including the identification of the firm(s) that may actually conduct the work or a description of the process they will use to select the firm(s).
3. A demonstration of the PRPs' capability to finance the RI/FS.
4. A statement of willingness by the PRPs to reimburse U.S. EPA for past costs and costs incurred in overseeing the PRPs' conduct of the RI/FS.
5. The name, address, and phone number of the party or steering committee that will represent the PRPs in negotiations.

If your offer contemplates modifications to the AOC or SOW, you must make revisions to the enclosed proposed AOC and SOW and submit this version to U.S. EPA prior to the expiration of the 60 day negotiation moratorium. Your response should provide reasons for or the basis of such modifications to the proposed AOC and SOW. Major modifications to the AOC and/or SOW may not be considered a good faith offer by U.S. EPA.

INITIAL CONFERENCE

To further facilitate your and other PRPs' ability to present a "good faith offer" within the 60-day time limit, U.S. EPA is organizing an initial settlement conference at the following time and place:

Date: March 19, 2013

Time: 10:00 a.m.

**Place: U.S. EPA
Room 611, 6th Floor
77 West Jackson Blvd.
Chicago, IL 60604**

INFORMATION RELEASE

U.S. EPA is providing the following information as an enclosure with this letter:

1. An updated list of names and addresses of PRPs to whom this notification is being sent. Inclusion on, or exclusion from, the list does not constitute a final determination by U.S. EPA concerning the liability of any party for the release or threat of release of hazardous substances at the Site.

DEMAND FOR PAYMENT

With this letter, U.S. EPA demands that you reimburse U.S. EPA for its costs incurred to date, and encourages you to voluntarily negotiate an administrative order on consent under which you and other PRPs agree to perform the RI/FS.

In accordance with CERCLA, U.S. EPA already has undertaken certain actions and incurred certain costs in response to conditions at the Site. Such costs include, but are not limited to, expenditures for investigation, planning, response, oversight, and enforcement activities.

The cost of the response actions performed at the Site through U.S. EPA funding was approximately \$628,813.29 as of December 31, 2013 (see enclosed Itemized Cost Summary). In accordance with Section 107(a) of CERCLA, demand is hereby made for payment of the above amount plus any and all interest recoverable under Section 107 or under any other provisions of law.

As indicated above U.S. EPA anticipates expending additional funds for the RI/FS. Whether

U.S. EPA funds the entire RI/FS, or simply incurs costs by overseeing the parties conducting these response activities, you are potentially liable for these expenditures plus interest.

ABILITY TO PAY - FUTURE FINANCIAL REVIEW

If your company wishes to settle, but would face a severe financial hardship by remitting the full payment amount, you may request that the U.S. EPA review your financial ability to pay. Under U.S. EPA policy, it is possible in appropriate circumstances for the payment to be made in installments. This may be considered as part of U.S. EPA's financial review. To process a claim of financial hardship, the U.S. EPA will require you to substantiate that claim by submitting detailed financial documentation. A complete description of the U.S. EPA's financial review process is available upon request.

PRP STEERING COMMITTEE

U.S. EPA recommends that all PRPs meet to select a steering committee responsible for representing the group's interests. Establishing a manageable group is critical for successful negotiations with U.S. EPA. Alternatively, U.S. EPA encourages each PRP to select one person from its company or organization who will represent its interests.

ADMINISTRATIVE RECORD

Pursuant to CERCLA Section 113(k), U.S. EPA must establish an administrative record that contains documents that form the basis of U.S. EPA's decision on the selection of a response action for a site. The administrative record files will be available to the public for inspection and comment at:

**The Superfund Records Center
U.S. EPA, Region 5
77 W. Jackson Blvd., 7th Floor
Chicago, Illinois 60604
Hours: 8:00 a.m. – 4:00 p.m. (Monday – Friday)
(312) 353-7626**

Copies of documents in the administrative record file will be available for public inspection at the local repository located at:

**Gary Public Library
Du Bois Branch
1835 Broadway
Gary, Indiana 46407
(219) 886-9120**

PRP RESPONSE AND U.S. EPA CONTACT PERSON

Please contact U.S. EPA in writing within 14 days after the date of this letter to indicate your willingness to participate in negotiations at this Site. You have 60 calendar days from this notice to provide U.S. EPA with a good faith offer, in writing, demonstrating your willingness to perform the RI/FS. You may respond individually or through a steering committee if such a committee has been formed. If U.S. EPA does not receive a timely response, U.S. EPA will assume that you do not wish to negotiate a resolution of your liabilities in connection with the response, and that you have declined any involvement in performing the response activities.

Your response to this notice letter should be sent to:

Leslie Blake, Remedial Project Manager
U.S. Environmental Protection Agency -- Region 5
Superfund Division (SR-6J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
Phone: (312) 353-7921

The factual and legal discussions contained in this letter are intended solely for notification and information purposes. They are not intended to be and cannot be relied upon as final U.S. EPA positions on any matter set forth herein.

RESOURCES AND INFORMATION FOR SMALL BUSINESSES

As you may be aware, on January 11, 2002, President Bush signed into law the Superfund Small Business Liability Relief and Brownfields Revitalization Act. This Act contains several exemptions and defenses to CERCLA liability, which we suggest that all parties evaluate. You may obtain a copy of the law at <http://www.epa.gov/brownfields/laws/sblbra.htm> and review EPA guidances regarding these exemptions at <http://cfpub.epa.gov/compliance/resources/policies/cleanup/superfund/>.

In addition, if you are a "service station dealer" who accepts used oil for recycling, you may qualify for an exemption from liability under Section 114(c) of CERCLA. EPA guidance regarding this exemption can be found on the Internet at <http://cfpub.epa.gov/compliance/resources/policies/cleanup/superfund/>. If you believe you may qualify for the exemption, please contact contact Jeffrey Cahn, Associate Regional Counsel at (312) 886-6670 or Leslie Blake, Remedial Project Manager at (312) 353-7921 to request an application/information request specifically designed for service station dealers.

EPA has created a number of helpful resources for small businesses. EPA has established the National Compliance Assistance Clearinghouse as well as Compliance Assistance Centers which

offer various forms of resources to small businesses. You may inquire about these resources on the Agency's website at <http://www.epa.gov>. In addition, information on contacting EPA's Small Business Ombudsman is available at <http://www.epa.gov/sbo>. Finally, EPA developed a fact sheet about the Small Business Regulatory Enforcement Fairness Act (SBREFA), which is enclosed with this letter.

If you have any questions regarding the technical aspects of this letter, please contact Leslie Blake, Remedial Project Manager, at (312) 353-7921, email blake.leslie@epa.gov. If you have an attorney handling your legal matters, please direct his or her questions to Jeffrey Cahn, Associate Regional Counsel, at (312) 886-6670, e-mail cahn.jeff@epa.gov.

My staff and I look forward to working with you during the coming months.

Sincerely,

A handwritten signature in blue ink that reads "Joan Tanaka".

Joan Tanaka, Chief
Remedial Response Branch #1

Enclosures: 1. Administrative Order on Consent
 2. Statement of Work
 3. SBREFA Fact Sheet
 4. PRP List
 5. Itemized Cost Summary

cc: Mr. Robin Burr
 Operations Assistant
 U.S. Department of Interior
 Office of Environmental Policy and Compliance
 Custom House, Room 244
 200 Chestnut Street
 Philadelphia, PA 19106-2904

 Scott Pruitt, Field Supervisor
 U.S. Fish and Wildlife Service
 620 South Walker Street
 Bloomington, Indiana 47403-2121


 Nick Heinzelman
 Indiana Department of Natural Resources
 402 West Washington Street, Room 255L
 Indianapolis, Indiana 46204

 Annette Trowbridge
 Environmental Contaminants Program Coordinator
 U. S. Fish and Wildlife Service, Region 3
 5600 American Boulevard West, Suite 990
 Bloomington, Minnesota 55437-1458

 Stephanie Andrews
 Senior Environmental Manager
 Indiana Department of Environmental Management
 Federal Programs Section
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2241

Lisa McCoy
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204-2241

PRP List

1. American Chemical Service, Inc.
Attn: Mr. Thomas Froman
420 S. Colfax Avenue
Griffith, Indiana 46319
2. Borg Warner Transmission Systems, Inc.
c/o Schiff Hardin, LLP
Attn: Joshua More
233 South Wacker Drive, Suite 6600
Chicago, Illinois 60606
3. BP America, Inc.
Attn: Douglas S. Reinhart
Senior Counsel
BP Legal
150 W. Warrenville Road, Mail Code 200-1W
Naperville, Illinois 60563
4. Brandenburg Industrial Services Company
Attn: Ms. Susan E. Brice
Bryan Cave LLP
161 N. Clark Street
Suite 4300
Chicago, IL 60601
5. Ms. Ellen J. Kullman, President
E.I. du Pont de Nemours and Company
1007 Market Street
Wilmington, Delaware 19898
6. Georgia-Pacific LLC
Attn: John C. Bottini
Senior Counsel - Environmental
133 Peachtree Street, N.E.
43rd Floor
Atlanta, Georgia 30303
7. non responsive


8. Union Carbide Corporation
c/o The Dow Chemical Corporation
Attn: Ms. Shannon S. Callahan
100 South Independence Mall West
Philadelphia, Pennsylvania 19106-2399
9. Mr. Kenneth P. Fischl, President
Union Tank Car Company
181 W. Madison Street, 26th Floor
Chicago, Illinois 60602
10. Mr. D M James, President
Legacy Vulcan Corporation
(f/k/a) Vulcan Materials Company
1200 Urban Center Drive
P.O. Box 385014
Birmingham, Alabama 35242-5014
11. Waste Management of Indiana, Inc.
d/b/a: Calumet Waste Systems, Inc.
Attn: Francis Chin, Senior Legal Counsel
1001 Fannin, Ste 4000
Houston, Texas 77002

Enclosure 3

Administrative Order on Consent

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:

Gary Development Landfill Site
Gary, Lake County, Indiana

Allied Waste Transportation, Inc.; American Chemical Service, Inc.; Ashland, Inc.; Atlantic Richfield Company; BFI Waste Systems of North America, LLC; BorgWarner Transmission Systems, Inc.; BP Products North America, Inc.; Brandenburg Industrial Service Company; E.I. du Pont de Nemours and Company; Evergreen Scavenger Service, L.L.C.; Georgia-Pacific LLC; Illiana Disposal Partnership; 3M Company; Republic Services of Indiana, Limited Partnership; Union Carbide Corporation; Union Tank Car Company; United States Steel Corporation; Legacy Vulcan Corp. (f/k/a/ Vulcan Materials Company); Wastehaul, Inc.; and Waste Management of Indiana, L.L.C. (d/b/a/ Calumet Waste Systems),

Respondents.

ADMINISTRATIVE SETTLEMENT
AGREEMENT AND ORDER ON
CONSENT FOR REMEDIAL
INVESTIGATION/FEASIBILITY STUDY

U.S. EPA Region 5

CERCLA Docket No.

V-W-14-C-004

Proceeding Under Sections 104, 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607, and 9622.

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ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("U.S. EPA") and Allied Waste Transportation, Inc.; American Chemical Service, Inc.; Ashland, Inc.; Atlantic Richfield Company; BFI Waste Systems of North America, LLC; Borg Warner Transmission Systems, Inc.; BP Products North America, Inc.; Brandenburg Industrial Service Company; E.I. du Pont de Nemours and Company; Evergreen Scavenger Service, L.L.C.; Georgia-Pacific LLC; Illiana Disposal Partnership; 3M Company; Republic Services of Indiana, Limited Partnership; Union Carbide Corporation; Union Tank Car Company; United States Steel Corporation; Legacy Vulcan Corp. (f/k/a/ Vulcan Materials Company); Wastehaul, Inc.; and Waste Management of Indiana, L.L.C. (d/b/a/ Calumet Waste Systems), ("Respondents.") The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") at the Gary Development Landfill Superfund Site located at 479 Cline Avenue in Gary, Indiana ("Site") and the reimbursement for Future Response Costs incurred by U.S. EPA in connection with the RI/FS.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of U.S. EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by U.S. EPA Delegation Nos. 14-14-C and 14-14-D. This authority was further redelegated by the Regional Administrator, U.S. EPA, Region 5 to the Director, Superfund Division, U.S. EPA, Region 5 by U.S. EPA Delegation Nos. 14-14-C and 14-14-D on May 2, 1996.

3. In accordance with Section 104(b)(2) and Section 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), U.S. EPA notified the Federal and Indiana natural resource trustees on February 25, 2013, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship. In accordance with Section 121(f)(1)(F), U.S. EPA has notified the State of Indiana (the "State") on February 25, 2013 of negotiations with potentially responsible parties regarding the implementation of the RI/FS for the Site.

4. U.S. EPA and Respondents recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law and determinations in Sections V and VI of this Settlement Agreement. Respondents agree

to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon U.S. EPA and upon Respondents and their agents, heirs, successors, and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or personal property, shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondents are jointly and severally liable for carrying out all activities required of them by this Order. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Order, the remaining Respondents shall complete all such requirements.

7. Respondents shall ensure that their contractors, subcontractors, and representatives retained to perform work at, or in connection with, the Site receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondents shall be responsible for any noncompliance with this Settlement Agreement.

8. The undersigned representative of each Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind the Respondent to this Settlement Agreement.

III. STATEMENT OF PURPOSE

9. In entering into this Settlement Agreement, the objectives of U.S. EPA and Respondents are: (a) to determine the nature and extent of contamination and any current or potential threat to the public health, welfare, or the environment posed by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site and to collect sufficient data for developing and evaluating effective remedial alternatives by conducting a Remedial Investigation ("RI") as more specifically set forth in the Statement of Work ("SOW") attached as Attachment A to this Settlement Agreement; (b) to identify and evaluate remedial alternatives that protect human health and the environment by preventing, eliminating, reducing or controlling any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study "FS" as more specifically set forth in the SOW; and (c) to recover Future Response Costs incurred by U.S. EPA with respect to this Settlement Agreement.

10. The Work conducted under this Settlement Agreement is subject to approval by U.S. EPA and shall provide all appropriate and necessary information to assess site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R.

Part 300 ("NCP"). Respondents shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP and all applicable U.S. EPA guidances, policies, and procedures.

IV. DEFINITIONS

11. Unless otherwise expressly provided herein, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "ARARs" mean all applicable local, state, and federal laws and regulations, and all "applicable requirements" or "relevant and appropriate requirements" as defined at 40 C.F.R. § 300.5 and 42 U.S.C. § 9261(d).

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

c. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the close of business of the next working day.

d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXIX.

e. "EPA" or "U.S. EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

f. "IDEM" shall mean the Indiana Department of Environmental Management and any successor departments or agencies of the State.

g. "Engineering Controls" shall mean constructed containment barriers or systems that control one of the following: downward migration, infiltration or seepage of surface runoff or rain; or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

h. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports, technical memoranda and other items pursuant to this Settlement Agreement, conducting community relations, providing technical assistance grants to community groups (if any), verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs (including fees), travel

costs, laboratory costs, ATSDR costs, the costs incurred pursuant to Paragraph 47 and 49 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), and Paragraph 33 (emergency response).

i. "Institutional controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and restrictive covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

j. "Interest" shall mean interest at the rate specified for interest on investments of the U.S. EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

k. "NCP" or "National Contingency Plan" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

l. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

m. "Parties" shall mean U.S. EPA and Respondents.

n. "RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.*

o. "Respondents" shall mean Allied Waste Transportation, Inc.; American Chemical Service, Inc.; Ashland, Inc.; Atlantic Richfield Company; BFI Waste Systems of North America, LLC; BorgWarner Transmission Systems, Inc.; BP Products North America, Inc.; Brandenburg Industrial Service Company; E.I. du Pont de Nemours and Company; Evergreen Scavenger Service, L.L.C.; Georgia-Pacific LLC; Illiana Disposal Partnership; 3M Company; Republic Services of Indiana, Limited Partnership; Union Carbide Corporation; Union Tank Car Company; United States Steel Corporation; Legacy Vulcan Corp. (f/k/a/ Vulcan Materials Company); Wastehaul, Inc.; and Waste Management of Indiana, L.L.C. (d/b/a/ Calumet Waste Systems).

p. "RI/FS Planning Documents" shall mean the RI/FS Work Plan, the Sampling and Analysis Plan ("SAP"), as described in the "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, October, 1988," the Field Sampling Plan ("FSP"), the Quality Assurance Project Plan ("QAPP"), the Quality Management Plan ("QMP"), the Health and Safety Plan ("HSP"), and the Schedule.

q. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

r. "Site" shall mean the Gary Development Landfill Superfund Site (CERCLIS ID No. IND077005916) located at 479 N. Cline Avenue, Gary, Lake County, Indiana, and nearby areas where Site-related hazardous substances, pollutants or contaminants have or may have come to be located. The coordinates for the approximate center of the Site are: Latitude, 41°36'50.62" N; Longitude, 87°25'35.21" W. The Site is depicted on the U.S.G.S. Highland, Indiana, Quadrangle Topographic Map and in the southwest corner of section 35 in Township 37 North, Range 9 West. The Site lies adjacent to the Grand Calumet River about 500 feet west of the Gary Airport south of Lake Michigan. The Site is bounded to the north and east by E & J Railroad, to the south by the Grand Calumet River, and to the west by AMG. The Site property is comprised of three (3) parcels, totaling 62 total acres, of which approximately 55 acres were used for solid and hazardous waste disposal. The Site is depicted generally on the map attached as Appendix B to this Settlement Agreement.

s. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation U.S. EPA-approved submissions. U.S. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by U.S. EPA. In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

t. "State" shall mean the State of Indiana.

u. "Statement of Work" or "SOW" shall mean the Statement of Work for development of a RI/FS for the Site, as set forth in Appendix A to this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.

v. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (4) any "hazardous waste" under 329 IAC 3.1-6.

w. "Work" shall mean all activities Respondents are required to perform under this Settlement Agreement, except those required by Section XIV (Retention of Records).

V. FINDINGS OF FACT

12. Based on available information, including the administrative record in this matter, U.S. EPA hereby finds that:

a. The Site is located in an industrial and commercial area that meets Environmental Justice criteria. The Site is within the Grand Calumet River/Indiana Harbor Canal area of concern as outlined by EPA's Great Lakes National Program Office. Wetland areas, which are potentially contaminated as the result of Gary Development Landfill operations are present on the southeastern portion of the property. The wetland includes habitats known to be used, or to have been used, by several State endangered species, specifically the Marsh Wren, Least Bittern, Upland Sandpiper, Common Moorhen, Black Tern, and Yellow-headed Blackbird. The wetland is adjacent to the Grand Calumet River.

b. The Site consists of the landfill where hazardous substances were deposited, and a wetland into which contaminants including lead, chromium (total), silver, zinc, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene were potentially released from the Gary Development Landfill.

c. The Gary Development Landfill was a permitted solid waste landfill that accepted unauthorized hazardous waste for disposal. The landfill neither achieved interim status under RCRA nor obtained a RCRA permit. An industrial/sanitary landfill was operated at the Site from 1975 to 1989. The landfill accepted hazardous substances including volatile organic compounds, semi-volatile organic compounds, asbestos, heavy metals, polychlorinated biphenyls and pesticides, in addition to household wastes. The landfill stopped accepting waste materials in 1989. Neither the nature nor the quantity of all of the waste that was deposited into the landfill is known, because the operator did not have a detailed waste analysis plan on file for the waste it accepted.

d. In early 1973, the operator of the landfill began to explore developing a sanitary landfill in a mined-out, water-filled, sand pit. On May 15, 1973, the Indiana Stream Pollution Control Board ("SPCB") approved the operator's proposal to dewater the sand pit. On June 19, 1973, SPCB granted the operator's construction permit SW133, allowing preparatory construction work for a sanitary landfill to begin. On August 29, 1974, the State conducted its final inspection of the Gary Development Landfill, which led to SPCB's granting final approval to the operator to commence sanitary landfill operation. The landfill began accepting solid waste for disposal in September, 1974. On February 20, 1975, SPCB sent the operator its operating permit, No. 45-2.

e. In April, May, and August of 1976, the operator of the landfill was found to have discharged leachate into the Grand Calumet River without an NPDES permit. Lab analysis of leachate samples taken on August 27, 1976 indicated that significant amounts of heavy metals and oils were being pumped into the Grand Calumet River. In 1979 an Agreed Order was filed with the operator to address leachate concerns.

f. Inspections conducted by the Indiana State Board of Health found that areas around the working area did not have adequate cover and that fly ash was being used as cover. Other inspections conducted by the Indiana State Board of Health noted that leachate and

contaminated water discharged into the Grand Calumet River without an NPDES permit and that fly ash was used as a cover for the landfill. As a result of the inspection findings, the operator was found not in compliance with its construction and operating permit. A Recommended Order regarding the findings was issued on February 16, 1983.

g. IDEM records show that uncontrolled and untreated drainage was allowed to discharge (via pumping or by run-off) directly into the Calumet River while the landfill was active. The operator was instructed to maintain a pond to control drainage. Inspections conducted in 1984 and 1990 revealed that the operator installed a culvert/drainage pipe under the access road to discharge drainage from the facility. No NPDES permit was obtained for the discharge.

h. In 1985, the operator was notified to submit paperwork to operate a hazardous waste facility and submit proof of financial assurance. In 1986, U.S. EPA issued an administrative complaint and compliance order, which alleged that Gary Development Landfill accepted hazardous waste for disposal without interim status under RCRA and without a RCRA permit. Gary Development's appeal of this order was dismissed as untimely in August 1996. The landfill stopped operating in 1989.

i. An inspection of the Gary Development Landfill was conducted on February 18, 1992 and noted numerous violations of the Indiana Administrative Code and federal Land Disposal Restrictions. On January, 30, 1995, other violations were noted. An inspection conducted by U.S. EPA in 1996 also revealed that landfill material had been pushed into the wooded wetland area adjacent to the Grand Calumet River.

j. In August 1996, after negotiations regarding U.S. EPA's 1986 complaint and compliance order, a consent decree was issued requiring Gary Development to pay \$86,000 in fines and \$40,000 into a trust fund. The monies in the trust fund were to be used for RCRA closure and post-closure care of the landfill, and for conducting a ground water quality assessment program. In addition, the monies were to be used for remediation of contamination and/or the prevention of releases of hazardous substances at the facility. Current cost estimates for assessments, cover and vegetation, erosion control measures, groundwater monitoring wells, gas system installation-flares, drain and fill ponds, capping, and other work exceeded the amount in the trust fund. Due to a lack of monies to adequately address closure and post-closure activities at the facility, in 1997, U. S. EPA deferred the facility to CERCLA. In 2001, the landfill was given a Not-Under-Control status.

k. During a periodic inspection, IDEM staff identified several abandoned drums at the Site on January 8, 2002. As a result, EPA conducted a time critical removal action at the Site. Numerous containers of various substances (oils, paint, insecticides, antifreeze, and electrical capacitors) were removed from the property.

l. On April 20, 2005, staff from IDEM's Site Investigation Section conducted a Reassessment at the Site. Ground water and wetland sediment samples were collected. Elevated

levels of metals, semi-volatile organic compounds, and pesticides were detected in the wetland samples.

m. On May 5, 2009, IDEM Site Investigation Section conducted an Expanded Site Inspection at the Site. Once again, elevated levels greater than three (3) times background of metals, semi-volatile organic compounds, and pesticides were detected in the adjacent wetland samples.

n. The probable point of entry to surface water is the discharge area from an unpermitted outfall and from other areas at the Gary Development Landfill during its active operations. The facility did not obtain an NPDES permit for any surface water that discharged from the landfill. Inspection reports completed by IDEM and U.S. EPA personnel, along with historic aerial photographs reveal that the operator routinely discharged water, which may have come in contact with leachate and other hazardous materials, into the Grand Calumet River where wetlands are present adjacent to the landfill.

o. An assessment of injury to human uses of fishery resources in the Grand Calumet River and surrounding areas was conducted by the U. S. Fish and Wildlife Service in 2003. The primary contaminants of concern addressed in this assessment include the same hazardous substances (i.e. metals, semi-volatile organic compounds, PCBs, and pesticides) as found at the Site. In general, the assessment indicates sediments from the Grand Calumet River and the Indiana Harbor Canal (which are part of the 15-mile surface water migration pathway for the Gary Development Landfill) have concentrations of numerous contaminants in the sediments sufficient to alter the chemical composition of fish tissues to such an extent that the human uses of fishery resources would be adversely affected. Biological resources such as benthic invertebrates, fish, birds, and mammals were also included in the study and were found to be impacted. Numerous sources of contamination have been identified in the vicinity of the Grand Calumet River. The Grand Calumet River is undergoing remediation by U.S. EPA and the U.S. Army Corps of Engineers under the Great Lakes Legacy Act.

p. The landfill was not properly lined and there is no maintained engineered cover and no functioning and maintained run-on control system and runoff management system, enabling hazardous substances to migrate from the landfill into the adjacent wetland located at the south east corner of the landfill.

q. While the landfill was active, IDEM inspectors noted that landfill material had been pushed into the adjacent wetland. The operator did not have permission to perform this action which may have released contaminants associated with the landfill material into the wetland. The inspectors also noticed several point source discharges of storm water runoff, creating rills and gullies, leaving the property's southern boundary into the Grand Calumet River where the wetland is located. The runoff was visibly laden with sediment and caused a discoloration of the Grand Calumet River along the facility boundary.

r. Another possible route of the contamination into the wetland is that the landfill could be leaking into the wetland via ground water. The property of the landfill is geologically unacceptable for waste disposal and is a hazard to ground water and surface-water resources in its vicinity. Because of the highly permeable nature of the Calumet aquifer surrounding the Gary Development Landfill, geologic conditions in the area around and beneath the landfill were not appropriate for the disposal of a hazardous waste. Because of the fact that an engineered liner was never installed at the landfill, and the landfill cap is incomplete and not maintained, a potential exists for the landfill to leak hazardous substances into the adjacent wetlands located at the southeast corner of the landfill. A potential exists for ground water contamination from the landfill.

s. The site has unrestricted access and visitors and trespassers can access the site from several perimeter roads on foot. Since at least the early fall of 2012, there have been signs of trespassing and recent recreation vehicle (e.g., motorcycle and four wheeler all-terrain vehicles) entry. Trespassers and other visitors could be exposed to contaminated surface soil through direct contact. There are active methane vents on the landfill that could present a fire or explosion hazard for trespassers and other visitors to the site and thus could harm people's health. According to IDEM staff, at times, the venting gasses have set off their portable explosimeters. According to the Agency for Toxic Substances and Disease Registry ("ATSDR"), methane is explosive even at low concentrations in air (5 to 15% methane).

t. The primary hazardous substances of concern are acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, phenanthrene, pyrene, chromium (total), lead, silver, and zinc. A potential release of these contaminants from the landfill to the adjacent wetland that borders the Grand Calumet River was documented during an Expanded Site Inspection conducted on May 5, 2009, by IDEM staff. All contaminants listed in the Expanded Site Inspection were found at levels three times or more above background.

u. The Site was listed on the National Priorities List ("NPL") pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on September 15, 2011. The Site scored based on the environmental threat of surface water migration pathway from the landfill into the wetland that has resulted in Level II contamination of environmental targets.

v. The wetland is considered an area/habitat known to be used by several state endangered bird species, including the Marsh Wren, *Cistothorus palustris*. The Marsh Wren is a wetland species that uses aquatic plants for nesting and feeding habitats and forages on or near the marsh floor. The Marsh Wren can be expected to contact wetland surface water and sediment. Also, the wetland area, a particular area, relatively small in size, is important to the maintenance of unique biotic communities. The wetland is part of the Grand Calumet River Corridor.

w. The Indiana State Department of Health ("ISDH") currently has a full fish consumption advisory for the Grand Calumet River ("Do not eat any fish from this river").

People could be exposed to contaminants in the Grand Calumet River (from the site and other nearby pollution sources) if they violate the advisory and eat the contaminated fish or contact the contaminated sediments. According to the ATSDR, people may not be following the existing fish advisory and eating fish from the advisory areas of the Grand Calumet River. Eating these fish regularly over many years could harm people's health and represents a public health hazard.

x. Polycyclic aromatic hydrocarbons ("PAHs") can be harmful to a person's health under some circumstances. Several of the PAHs, including benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[j]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-c,d]pyrene, have caused tumors in laboratory animals when the animals inhaled, ingested, or had prolonged contact with the chemicals. Studies of people show that individuals exposed by breathing or skin contact for long periods to mixtures that contain PAHs and other compounds can also develop cancer.

y. The Department of Health and Human Services ("DHHS") has determined that benz[a]anthracene, benzo[b]fluoranthene, benzo[j]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, dibenz[a,h]anthracene, and indeno[1,2,3-c,d]pyrene are known animal carcinogens. The International Agency for Research on Cancer ("IARC") has determined the following: benz[a]anthracene and benzo[a]pyrene are probably carcinogenic to humans; benzo[b]fluoranthene, benzo[j]fluoranthene, benzo[k]fluoranthene, and indeno[1,2,3-c,d]pyrene are possibly carcinogenic to humans; and anthracene, benzo[g,h,i]perylene, benzo[e]pyrene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene are not classifiable as to their carcinogenicity to humans. EPA has determined that benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-c,d]pyrene are probable human carcinogens and that acenaphthylene, anthracene, benzo[g,h,i]perylene, fluoranthene, fluorene, phenanthrene, and pyrene are not classifiable as to human carcinogenicity. Acenaphthene has not been classified for carcinogenic effects by the DHHS, IARC, or EPA.

z. Breathing high levels of chromium(VI) can cause irritation to the lining of the nose, nose ulcers, runny nose, and breathing problems, such as asthma, cough, shortness of breath, or wheezing. The concentrations of chromium in air that can cause these effects may be different for different types of chromium compounds, with effects occurring at much lower concentrations for chromium(VI) compared to chromium(III). The main health problems seen in animals following ingestion of chromium(VI) compounds are irritation and ulcers in the stomach and small intestine and anemia. Chromium(III) compounds are much less toxic and do not appear to cause these problems.

aa. The DHHS, IARC, and the EPA have determined that chromium(VI) compounds are known human carcinogens. In workers, inhalation of chromium(VI) has been shown to cause lung cancer. Chromium(VI) also causes lung cancer in animals. An increase in stomach tumors was observed in humans and animals exposed to chromium(VI) in drinking water.

bb. Exposure to dust containing relatively high levels of silver compounds such as silver nitrate or silver oxide may cause breathing problems, lung and throat irritation and stomach pain. These effects have been seen in workers in chemical manufacturing facilities that make silver nitrate and silver oxide. Skin contact with silver compounds has been found to cause mild allergic reactions, such as rash, swelling, and inflammation, in some people. No studies of cancer or birth defects in animals from eating, drinking, or breathing in silver compounds were found. Therefore, it is not known if these effects would occur in humans.

cc. The effects of lead are the same whether it enters the body through breathing or swallowing. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults to lead at work has resulted in decreased performance in some tests that measure functions of the nervous system. Lead exposure may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people. Lead exposure may also cause anemia. At high levels of exposure, lead can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production.

dd. The DHHS has determined that lead and lead compounds are reasonably anticipated to be human carcinogens based on limited evidence from studies in humans and sufficient evidence from animal studies, and the EPA has determined that lead is a probable human carcinogen. The IARC has determined that inorganic lead is probably carcinogenic to humans. IARC determined that organic lead compounds are not classifiable as to their carcinogenicity in humans based on inadequate evidence from studies in humans and in animals.

ee. The Site is not fenced nor are there warning signs indicating the hazards present on the landfill. Accordingly, access to the Site is largely uncontrolled, and trespassers and other visitors have access to the Site.

ff. Respondents that arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances at the facility are: American Chemical Service, Inc., an Indiana corporation; Ashland Inc., a Kentucky corporation; Atlantic Richfield Company, a Delaware corporation; BorgWarner Transmission Systems Inc., a Delaware corporation; BP Products North America Inc., a Maryland corporation; Brandenburg Industrial Service Company, an Illinois corporation; E.I. du Pont de Nemours and Company, a Delaware corporation; Georgia-Pacific LLC, a Delaware corporation; 3M Company, a Delaware corporation; Union Carbide Corporation, a New York corporation; Union Tank Car Company, a Delaware corporation; United States Steel Corporation, a Delaware corporation; and Legacy Vulcan Corp., f/k/a/ Vulcan Materials Company, a New Jersey corporation. Respondents that accepted hazardous substances for transport to the facility selected by Respondents are: Allied Waste Transportation, Inc., a Delaware corporation; BFI Waste Systems of North America, LLC, a Delaware limited liability company; Evergreen Scavenger Service, L.L.C., a Delaware limited liability company; Illiana Disposal Partnership, an Indiana partnership; Republic Services of Indiana, Limited Partnership, a Delaware limited partnership; Wastehaul, Inc., an Indiana

corporation; and Waste Management of Indiana, L.L.C. (d/b/a/ Calumet Waste Systems), a Delaware limited liability company.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record in this matter, U.S. EPA has determined that:

13. The Gary Development Landfill Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

14. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14) or constitutes "any pollutant or contaminant" that may present an imminent and substantial danger to public health or welfare under Section 104(a)(1) of CERCLA.

15. The conditions described in the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

16. Each Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

17. Respondents are responsible parties under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622.

a. Each Respondent is either a person who generated the hazardous substances found at the Site, or a person who arranged for disposal or transport for disposal of hazardous substances at the Site. Each Respondent therefore may be liable under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

b. Respondents American Chemical Service, Inc.; Ashland Inc.; Atlantic Richfield Company; BorgWarner Transmission Systems Inc.; BP Products North America Inc.; Brandenburg Industrial Service Company; E.I. du Pont de Nemours and Company; Georgia-Pacific LLC; 3M Company; Union Carbide Corporation; Union Tank Car Company; United States Steel Corporation; and Legacy Vulcan Corp., f/k/a/ Vulcan Materials Company, a New Jersey corporation arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

c. Respondents Allied Waste Transportation, Inc.; BFI Waste Systems of North America, LLC; Evergreen Scavenger Service, L.L.C.; Illiana Disposal Partnership; Republic Services of Indiana, Limited Partnership; Wastehaul, Inc.; and Waste Management of Indiana, L.L.C. (d/b/a/ Calumet Waste Systems), accepted hazardous substances for transport to the facility

selected by Respondents, within the meaning of Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4).

18. The actions required by this Settlement Agreement are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

19. U.S. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

20. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

21. Selection of Contractors, Personnel.

a. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within 30 days of the Effective Date of this Settlement Agreement, and before the Work outlined below begins, Respondents shall notify U.S. EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by U.S. EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to U.S. EPA's review, for verification that such persons meet minimum technical background and experience requirements. If Respondents fail to demonstrate to U.S. EPA's satisfaction that Respondents are qualified to perform properly and promptly the actions set forth in this Settlement Agreement, U.S. EPA may take over the work required by this Settlement Agreement.

b. If U.S. EPA disapproves in writing of any person's or persons' technical qualifications, Respondents shall notify U.S. EPA of the identity and qualifications of the replacement(s) within 30 days of the written notice. If U.S. EPA subsequently disapproves of the replacement(s), U.S. EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondents. EPA will indicate the basis for such subsequent disapproval in writing. During the course of the RI/FS, Respondents shall notify U.S. EPA in writing of any changes or additions in the supervisory personnel used to carry out such Work, providing their names, titles, and qualifications. U.S. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

22. Within 30 days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondents required by this Settlement Agreement and shall submit to U.S. EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. U.S. EPA retains the right to disapprove of the designated Project Coordinator. If U.S. EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify U.S. EPA of that person's name, address, telephone number and qualifications within 15 days following U.S. EPA's disapproval. Respondents shall have the right to change their Project Coordinator subject to U.S. EPA's right to disapprove. Respondents shall notify U.S. EPA 15 days before such change is made. The initial notification may be made orally, but shall be promptly followed by a written notification.

23. U.S. EPA has designated Ms. Leslie Blake of the Superfund Division, Region 5 as its Project Coordinator. U.S. EPA will notify Respondents of a change in its designation of the Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to:

Ms. Leslie Blake
Remedial Project Manager
U.S. EPA, Superfund Division
Mail Code SR-6J
77 West Jackson Blvd.
Chicago, Illinois 60604-3590

Respondents are encouraged to make their submissions to U.S. EPA on recycled paper (which includes significant post-consumer waste paper content where possible) and using two-sided copies. Respondents shall make submissions electronically according to U.S. EPA Region 5 specifications. Receipt by Respondents' Project Coordinator of any notice or communication from U.S. EPA relating to this Settlement Agreement shall constitute receipt by Respondents. Documents to be submitted to the Respondents shall be sent to:

Mike Samples
de maximis, inc.
450 Montbrook Lane
Knoxville, TN 37919

24. U.S. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, U.S. EPA's Project Coordinator shall have the authority consistent with the NCP to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the U.S. EPA Project Coordinator from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

25. U.S. EPA and Respondents shall have the right, subject to Paragraph 22, to change their respective Project Coordinator. Respondents shall notify U.S. EPA 15 days before such a change is made. The initial notification by either party may be made orally, but shall be promptly followed by a written notice.

26. U.S. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of U.S. EPA, but not to modify the RI/FS Planning Documents or other work plans.

IX. WORK TO BE PERFORMED

27. a. Respondents shall conduct the RI/FS in accordance with the provisions of this Settlement Agreement, the SOW, CERCLA, the NCP, U.S. EPA guidance related to remedial investigations and feasibility studies including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive #9355.3-01), "Guidance for Data Usability in Risk Assessment" (OSWER Directive #9285.7-05), Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A), Interim Final (EPA-540-1-89-002), OSWER Directive 9285.7-01A, December 1, 1989; and Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), Interim, (EPA 540-R-97-033), OSWER Directive 9285.7-01D, January 1998, guidances referenced in the SOW, and any RI/FS related guidance subsequently issued by U.S. EPA.

b. In the RI and FS Reports, Respondents shall address the factors required to be taken into account in Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430 of the NCP, 40 C.F.R. § 300.430. The RI shall characterize the geology and hydrogeology of the Site, determine the nature and extent of hazardous substances, pollutants or contaminants at or from the Site, and characterize all ecological zones including terrestrial, riparian, wetlands, aquatic/marine, and transitional. Respondents shall prepare, for inclusion with the RI Report, a determination of

the nature and extent of the current and potential threat to the public health or welfare or the environment posed by the release or threatened release of any hazardous substances, pollutants, or contaminants at or from the Site, including a "Baseline Human Health Risk Assessment" and "Baseline Ecological Risk Assessment". In the FS Report, Respondents shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action that protect human health and the environment by recycling waste or by eliminating, reducing and/or controlling risks posed through each pathway at the Site. In the FS Report, the Respondents shall evaluate a range of alternatives including but not limited to those alternatives described in 40 C.F.R. § 300.430(e) and remedial alternatives that utilize permanent solutions and alternative treatment technologies or resource recovery technologies. The FS Reports shall include a detailed analysis of individual alternatives against each of the nine evaluation criteria in 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis that focuses upon the relative performance of each alternative against the nine criteria in 40 C.F.R. § 300.430(e)(9)(iii). Respondents shall submit to U.S. EPA and the State three (3) copies of all plans, reports, submittals and other deliverables required under this Settlement Agreement, the SOW and the RI/FS Planning Documents in accordance with the approved schedule for review and approval pursuant to Section X (U.S. EPA Approval of Plans and Other Submissions). Upon request by U.S. EPA, Respondents shall submit in electronic form all portions of RI and FS Reports, any report or other deliverable Respondents are required to submit pursuant to provisions of this Settlement Agreement, including the SOW. Upon approval by U.S. EPA, all deliverables under this Settlement Agreement, including the SOW, shall be incorporated into and become enforceable under this Settlement Agreement.

28. Community Involvement Plan. U.S. EPA will prepare a Community Involvement Plan, in accordance with U.S. EPA guidance and the NCP. As requested by U.S. EPA, Respondents shall provide information supporting U.S. EPA's community relations programs.

29. Modification of any plans.

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit a memorandum documenting the need for additional data to the U.S. EPA Project Coordinator within 15 days of identification. U.S. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into reports and deliverables.

b. In the event of unanticipated or changed circumstances at the Site that affect the ability to perform work in a timely manner or to comply with this Settlement Agreement or the NCP, Respondents shall notify the U.S. EPA Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In addition to the authorities in the NCP, in the event that U.S. EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the RI/FS Planning Documents, U.S. EPA shall modify or amend the RI/FS Planning Documents in writing accordingly. Respondents shall perform the RI/FS Planning Documents as modified or amended.

c. U.S. EPA may determine that in addition to tasks defined in the initially approved RI/FS Planning Documents, other additional Work may be necessary to accomplish the objectives of the RI/FS as set forth in the SOW for this RI/FS. U.S. EPA may require that Respondents perform these response actions in addition to those required by the initially approved RI/FS Planning Documents, including any approved modifications, if it determines that such actions are necessary for a complete RI/FS.

d. Respondents shall confirm their willingness to perform the additional Work in writing to U.S. EPA within 14 days of receipt of the U.S. EPA request. If Respondents object to any modification determined by U.S. EPA to be necessary pursuant to this Paragraph, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and/or RI/FS Planning Documents shall be modified in accordance with the final resolution of the dispute.

e. Respondents shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by U.S. EPA in a written modification to the RI/FS Planning Documents or written work plan supplement. U.S. EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondents, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit U.S. EPA's authority to require performance of further response actions as otherwise provided in this Settlement Agreement.

30. Off-Site Shipment of Waste Material.

a. Respondents shall, prior to any off-site shipment of Waste Material from the Site to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to U.S. EPA's Designated Project Coordinator. However, this notification requirement shall not apply to any off-site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

b. Respondents shall include in the written notification the following information: (1) the name and location of the facility to which the Waste Material is to be shipped; (2) the type and quantity of the Waste Material to be shipped; (3) the expected schedule for the shipment of the Waste Material; and (4) the method of transportation. Respondents shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

c. The identity of the receiving facility and state will be determined by Respondents following the award of the contract for the remedial investigation and feasibility study. Respondents shall provide the information required by Subparagraph 30.b and 30.d as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

d. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-site location, Respondents shall obtain U.S. EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents shall only send hazardous substances, pollutants, or contaminants from the Site to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

31. Meetings. Respondents shall make presentations at, and participate in, meetings at the request of U.S. EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at U.S. EPA's discretion and with reasonable advance notice to Respondents.

32. Progress Reports. In addition to the deliverables set forth in this Settlement Agreement, Respondents shall provide to U.S. EPA monthly progress reports by the 15th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Settlement Agreement during that month, (2) include hard copies and electronic copies (according to U.S. EPA Region 5 specifications) of all results of sampling and tests and all other data received by the Respondents or shall reference other submittals if the results and data were submitted under separate cover, (3) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

33. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the U.S. EPA Project Coordinator or, in the event of his/her unavailability, the OSC or the Regional Duty Officer, U.S. EPA Region 5 Emergency Planning and Response Branch at (Tel: (312) 353-2318) of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and U.S. EPA takes such action instead, Respondents shall reimburse

U.S. EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance from the Site that initially occurs during the Work or is first identified by the Respondents during the Work, Respondents shall immediately notify the U.S. EPA Project Coordinator, the OSC or Regional Duty Officer at (312) 353-2318 and the National Response Center at (800) 424-8802. Respondents shall submit a written report to U.S. EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

X. U.S. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

34. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, including the SOW, U.S. EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, U.S. EPA shall not modify a submission without first providing Respondents at least one notice of deficiency and an opportunity to cure within 21 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

35. In the event of approval, approval upon conditions, or modification by U.S. EPA, pursuant to Subparagraph 34(a), (b), (c) or (e), Respondents shall proceed to take any action required by the plan, report or other item, as approved or modified by U.S. EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by U.S. EPA. Following U.S. EPA approval or modification of a submittal or portion thereof, Respondents shall not thereafter alter or amend such submittal or portion thereof unless directed by U.S. EPA. In the event that U.S. EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 34(c) and the submission had a material defect, U.S. EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties). U.S. EPA also retains the right to perform its own studies, complete the RI/FS (or any portion of the RI/FS), and seek reimbursement from Respondents for its costs; and/or seek any other appropriate relief.

36. Resubmission of Plans.

a. Upon receipt of a notice of disapproval, Respondents shall, within 15 days or such longer time as specified by U.S. EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as

provided in Section XVI, shall accrue during the 15-day period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 37 and 38.

b. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission that is independent of the deficient portion of the submission unless otherwise directed by U.S. EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for stipulated penalties under Section XVI (Stipulated Penalties) for the deficient portion.

c. Respondents shall not proceed further with any subsequent activities or tasks until receiving U.S. EPA approval for the following deliverables: RI/FS Work Plan, Field Sampling Plan and Analysis Plan, Quality Assurance Project Plan, Draft Remedial Investigation Report, Treatability Testing Work Plan and Sampling and Analysis Plan, and Draft Feasibility Study Report. While awaiting U.S. EPA approval on these deliverables, Respondents shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth in this Settlement Agreement.

d. For all remaining deliverables not enumerated above in subparagraph 36.c., Respondents shall proceed with all subsequent tasks, activities and deliverables without awaiting U.S. EPA approval on the submitted deliverable. U.S. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

37. If U.S. EPA disapproves a resubmitted plan, report or other item, or portion thereof, U.S. EPA may direct Respondents to correct the deficiencies. U.S. EPA also retains the right to modify or develop the plan, report or other item. Respondents shall implement any such plan, report, or item as corrected, modified or developed by U.S. EPA, subject only to their right to invoke the procedures set forth in Section XV (Dispute Resolution).

38. If upon resubmission, a plan, report, or item is disapproved or modified by U.S. EPA due to a material defect, Respondents shall be deemed to have failed to submit such plan, report, or item timely and adequately unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and U.S. EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by U.S. EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If U.S. EPA's disapproval or modification is not otherwise revoked, substantially modified or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

39. In the event that U.S. EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondents shall incorporate and integrate information supplied by U.S. EPA into the final reports.

40. All plans, reports, and other items submitted to U.S. EPA under this Settlement Agreement shall, upon approval or modification by U.S. EPA, be incorporated into and enforceable under this Settlement Agreement. In the event U.S. EPA approves or modifies a portion of a plan, report, or other item submitted to U.S. EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

41. Neither failure of U.S. EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by U.S. EPA. Whether or not U.S. EPA gives express approval for Respondents' deliverables, Respondents are responsible for preparing deliverables acceptable to U.S. EPA.

XI. QUALITY ASSURANCE, SAMPLING, AND DATA AVAILABILITY

42. Quality Assurance. Respondents shall assure that Work performed, samples taken, and analyses conducted conform to the requirements of the SOW, the QAPP and guidances identified therein. Respondents will assure that field personnel used by Respondents are properly trained in the use of field equipment and in chain of custody procedures. Respondents shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-5)" (EPA/240/B-01/003, March 2001) or equivalent documentation as determined by U.S. EPA.

43. Sampling.

a. All results of sampling, tests, modeling or other data (including raw data) generated by Respondents, or on Respondents' behalf, during the period that this Settlement Agreement is effective, shall be submitted to U.S. EPA (in paper and electronic form according to U.S. EPA Region 5 specifications) in the next monthly progress report after the results are received as described in Paragraph 32 of this Settlement Agreement. U.S. EPA will make available to Respondents validated data generated by U.S. EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. Respondents shall verbally notify U.S. EPA at least 14 days prior to conducting significant field events as described in the SOW and RI/FS Work Plan/Field Sampling Plan unless EPA agrees in writing to a shorter time. At U.S. EPA's verbal or written request, or the written request of U.S. EPA's oversight assistant, Respondents shall allow split or duplicate samples to be taken by U.S. EPA (and its authorized representatives) of any samples collected by Respondents in implementing this Settlement Agreement. All split samples of Respondents shall be analyzed by the methods identified in the QAPP.

44. Data Availability.

a. At all reasonable times, U.S. EPA and its authorized representatives shall have the authority to enter and freely move about all property at the Site and off-site areas where Work, if any, is being performed, for the purposes of inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the Site or Respondents and its contractor pursuant to this Settlement Agreement; reviewing the progress of Respondents in carrying out the terms of this Settlement Agreement; conducting tests as U.S. EPA or its authorized representatives deem necessary; using a camera, sound recording device or other documentary type equipment; and verifying the data submitted to U.S. EPA by Respondents. Respondents shall allow these persons to inspect and copy all records, files, photographs, documents, sampling and monitoring data, and other writings related to Work undertaken in carrying out this Settlement Agreement. Nothing herein shall be interpreted as limiting or affecting U.S. EPA's right of entry or inspection authority under federal law. All persons accessing the Site under this paragraph shall comply with all approved Health and Safety Plans.

b. Respondents may assert business confidentiality claims covering part or all of the documents or information submitted to U.S. EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by U.S. EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to U.S. EPA, or if U.S. EPA has notified Respondents that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondents. Respondents agree not to assert confidentiality claims with respect to any data related to Site conditions, sampling, or monitoring. Respondents shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondents assert business confidentiality claims.

45. In entering into this Settlement Agreement, Respondents waive any objections to any data gathered, generated, or evaluated by U.S. EPA, the State or Respondents in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by the Settlement Agreement or any U.S. EPA-approved Work Plans or Sampling and Analysis Plans. If Respondents object to any other data relating to the RI/FS, Respondents shall submit to U.S. EPA a report that specifically identifies and explains their objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to U.S. EPA within 15 days of the monthly progress report containing the data.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS

46. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by any of Respondents, such Respondents shall, commencing

on the Effective Date, provide U.S. EPA and its representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

47. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within 30 days after the Effective Date, or as otherwise specified in writing by the U.S. EPA Project Coordinator. Respondents shall immediately notify U.S. EPA if after using their best efforts they are unable to obtain such agreements. For purposes of this Paragraph, "best efforts" include the payment of reasonable sums of money in consideration of access. Respondents shall describe in writing their efforts to obtain access. U.S. EPA may then assist Respondents in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as U.S. EPA deems appropriate. Respondents shall reimburse U.S. EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs).

48. Notwithstanding any provision of this Settlement Agreement, U.S. EPA retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

49. If Respondents cannot obtain access agreements, U.S. EPA may obtain access for Respondents, perform those tasks or activities with U.S. EPA contractors, or terminate the Settlement Agreement. In the event that U.S. EPA performs those tasks or activities with U.S. EPA contractors and does not terminate the Settlement Agreement, Respondents shall perform all other activities not requiring access to that property, and shall reimburse U.S. EPA for all costs incurred in performing such activities. Respondents shall integrate the results of any such tasks undertaken by U.S. EPA into its reports and deliverables.

XIII. COMPLIANCE WITH OTHER LAWS

50. Respondents shall comply with all applicable local, state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

51. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, each Respondent shall preserve and

retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Respondents may comply with the records retention requirement by preserving all such records and documents as true and complete copies in electronic form and disposing of the paper form of such documents, provided that each Respondent stipulate to the authenticity of the electronic form of the records and documents. Until 10 years after commencement of construction of any remedial action, Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work or shall acquire and retain all such documents and records from their contractors and agents.

52. At the conclusion of this document retention period, Respondents shall notify U.S. EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by U.S. EPA, Respondents shall deliver any such records or documents to U.S. EPA. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondents assert such a privilege, they shall provide U.S. EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege asserted by Respondents. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

53. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by U.S. EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all U.S. EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XV. DISPUTE RESOLUTION

54. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

55. If Respondents object to any U.S. EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify U.S. EPA in writing of their objection(s) within 21 days of such action, unless the objection(s) has/have been resolved informally. U.S. EPA shall respond in writing within 21 days after receipt of Respondents'

written objection. U.S. EPA and Respondents shall have 30 days from U.S. EPA's receipt of Respondents' written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of U.S. EPA. Such extension may be granted verbally but must be confirmed in writing to be effective.

56. Any agreement reached by the Parties pursuant to this Section may be entered into orally but shall be confirmed in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an U.S. EPA management official at the Superfund Branch Chief level or higher will issue a written decision based upon the administrative record and applicable law. U.S. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondents' obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with U.S. EPA's decision, whichever occurs. Respondents shall proceed in accordance with U.S. EPA's final decision regarding the matter in dispute, regardless of whether Respondents agree with the decision. If Respondents do not agree to perform or do not actually perform the Work in accordance with U.S. EPA's final decision, U.S. EPA reserves the right in its sole discretion to conduct the Work itself, to seek reimbursement from Respondents, to seek enforcement of the decision, to seek stipulated penalties, and/or to seek any other appropriate relief.

XVI. STIPULATED PENALTIES

57. Respondents shall be liable to U.S. EPA for stipulated penalties in the amounts set forth in Paragraphs 58, 59, and 60 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondents shall include completion of the Work under this Settlement Agreement or any activities contemplated under any of the RI/FS Planning Documents, work plans or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by U.S. EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

58. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per day for any noncompliance identified in Subparagraph 58(b):

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500.00	1 st through 14 th day
\$ 1,000.00	15 th through 30 th day
\$ 2,000.00	31 st day and beyond

b. Compliance Milestones: Failure to meet due dates for payments of U.S. EPA's Future Response Costs; failure to establish escrow accounts in the event of disputes as provided under Paragraph 74, and failure to timely or adequately implement Work as described in Section III (Tasks 4 and 5) of the SOW in accordance with the Schedule in Exhibit A of the SOW.

59. Stipulated Penalty Amounts - RI/FS Planning Documents, Reports and Technical Memoranda

a. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate plans, reports, technical memoranda or other written documents required by Section III (Tasks 1 through 8) of the SOW in accordance with the Schedule in Exhibit A of the SOW:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 400.00	1 st through 14 th day
\$ 750.00	15 th through 30 th day
\$ 1,500.00	31 st day and beyond

60. Respondents shall be liable for stipulated penalties in the amount of \$ 500.00 per day for the first week or part thereof and \$1,000.00 per day for each week or part thereof thereafter for failure to meet any other obligation under this Settlement Agreement including the SOW that is not otherwise addressed in Paragraphs 58 and 59 of this Settlement Agreement.

61. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section X (U.S. EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after U.S. EPA's receipt of such

submission until the date that U.S. EPA notifies Respondents of any deficiency; and (2) with respect to a decision by the U.S. EPA management official at the Superfund Branch Chief level or higher, under Paragraph 56 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the U.S. EPA management official issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

62. Following U.S. EPA's determination that Respondents have failed to comply with a requirement of this Settlement Agreement, U.S. EPA may give Respondents written notification of the same and describe the noncompliance. U.S. EPA may send Respondents a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether U.S. EPA has notified Respondents of a violation.

63. All penalties accruing under this Section shall be due and payable to U.S. EPA within 30 days of Respondents' receipt from U.S. EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution). All payments to U.S. EPA under this Section shall be paid by EFT procedures to be provided to Respondents by Region 5 or by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," shall be mailed to U.S. EPA-Region 5, P.O. Box 371531, Pittsburgh, PA 15251-7531, indicate that the payment is for stipulated penalties, and shall reference the U.S. EPA Region and Site/Spill ID Number B52L, the U.S. EPA Docket Number assigned to this Settlement Agreement, and the name and address of the party(ies) making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to:

Jeffrey A. Cahn
Site Attorney
Office of Regional Counsel
Mail Code C-14J
77 West Jackson
Chicago, IL 60604-3590

Leslie Blake
Remedial Project Manager
Superfund Division
Mail Code SR-6J
77 West Jackson
Chicago, IL 60604-3590

64. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement Agreement.

65. Penalties shall continue to accrue as provided in Paragraph 61 during any dispute resolution period, but need not be paid until 30 days after the dispute is resolved by agreement or by receipt of U.S. EPA's decision, unless the agreement of decision state that no penalties are due.

66. If Respondents fail to pay stipulated penalties when due, U.S. EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 63.

67. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of U.S. EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that U.S. EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Settlement Agreement or in the event that U.S. EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by U.S. EPA), Paragraph 77. Notwithstanding any other provision of this Section, U.S. EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVII. FORCE MAJEURE

68. Respondents agree to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondents' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

69. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondents shall notify U.S. EPA orally within three (3) days of when Respondents first knew that the event might cause a delay. Within ten (10) days thereafter, Respondents shall provide to U.S. EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondents from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

70. If U.S. EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by U.S. EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any

other obligation. If U.S. EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, U.S. EPA will notify Respondents in writing of its decision. If U.S. EPA agrees that the delay is attributable to a *force majeure* event, U.S. EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. PAYMENT OF RESPONSE COSTS

71. Payments for Future Response Costs.

a. Respondents shall pay U.S. EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, but not less frequently than annually, U.S. EPA will send Respondents a bill requiring payment that includes Region 5's Itemized Cost Summary, which includes direct and indirect costs incurred by U.S. EPA and its contractors. Respondents shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 73 of this Settlement Agreement, according to the following procedures.

(i) If the payment amount demanded in the bill is for \$10,000 or greater, payment shall be made to U.S. EPA by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondents by U.S. EPA Region 5. Payment shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name, U.S. EPA Region 5, the Site/Spill ID Number B52L, and the U.S. EPA Docket Number assigned to this Settlement Agreement.

(ii) If the amount demanded in the bill is less than \$10,000, the Settling Respondents may in lieu of the EFT procedures in subparagraph 71.a.(i) make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party making the payment, and the EPA Site/Spill ID Number B52L. Settling Respondents shall send the check(s) to:

U.S. Environmental Protection Agency
Superfund Payments
Cincinnati Finance Center
PO Box 979076
St. Louis, MO 63197-9000

b. At the time of payment, Respondents shall send notice that payment has been made to:

Jeffrey A. Cahn
Site Attorney
Office of Regional Counsel
Mail Code C-14J
77 West Jackson
Chicago, IL 60604-3590

Leslie Blake
Remedial Project Manager
Superfund Division
Mail Code SR-6J
77 West Jackson
Chicago, IL 60604-3590

c. The total amount to be paid by Respondents pursuant to Subparagraph 71.a. shall be deposited in the Gary Development Landfill Superfund Site Special Account within the U.S. EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by U.S. EPA to the U.S. EPA Hazardous Substance Superfund.

72. If Respondents do not pay Future Response Costs within 30 days of Respondents' receipt of a bill, Respondents shall pay Interest on the unpaid balance of Future Response Costs. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If U.S. EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondents shall make all payments required by this Paragraph in the manner described in Paragraph 71.

72. Respondents may contest payment of any Future Response Costs under Paragraph 71 if they determine that U.S. EPA has made an accounting error or if they believe U.S. EPA incurred excess costs as a direct result of an U.S. EPA action that was inconsistent with the NCP or U.S. EPA has incurred costs outside of the Settlement Agreement. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the U.S. EPA Project Coordinator. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondents shall within the 30 day period pay all uncontested Future Response Costs to U.S. EPA in the manner described in Paragraph 71. Simultaneously, Respondents shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Illinois and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the U.S. EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondents shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If U.S. EPA prevails in the dispute, within 5 days of the resolution of the

dispute, Respondents shall pay the sums due (with accrued interest) to U.S. EPA in the manner described in Paragraph 71. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to U.S. EPA in the manner described in Paragraph 71. Respondents shall be disbursed or shall retain at their election any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse U.S. EPA for its Future Response Costs.

XIX. COVENANT NOT TO SUE BY U.S. EPA

74. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, U.S. EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondents of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XVIII. This covenant not to sue extends only to Respondents and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY U.S. EPA

75. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of U.S. EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent U.S. EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

76. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. U.S. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondents to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definition Future Response Costs;
- c. liability for performance of response action other than the Work;

- d. criminal liability;
- e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- g. liability for costs incurred or to be incurred by the ATSDR related to the Site;
- h. liability for costs incurred if U.S. EPA assumes the performance of the Work pursuant to paragraph 77.

77. Work Takeover. In the event U.S. EPA determines that Respondents have ceased implementation of any portion of the Work, are deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, U.S. EPA may assume the performance of all or any portion of the Work as U.S. EPA determines necessary. Respondents may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute U.S. EPA's determination that takeover of the Work is warranted under this Paragraph. Notwithstanding any other provision of this Settlement Agreement, U.S. EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENTS

78. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Future Response Costs, or this Settlement Agreement, including, but not limited to:

- a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;
- b. any claim arising out of the Work or arising out of the response actions for which the Future Response Costs have or will be incurred, including any claim under the United States Constitution, the Indiana Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or
- c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Future Response Costs.

79. These covenants not to sue or assert claims shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in

Paragraphs 76 (b), (c), and (e) - (g), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

80. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXII. OTHER CLAIMS

81. By issuance of this Settlement Agreement, the United States and U.S. EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents.

82. Except as expressly provided in Section XIX (Covenant Not to Sue by U.S. EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

83. No action or decision by U.S. EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review.

XXIII. CONTRIBUTION

84. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2), and that Respondents are entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Future Response Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which the Respondents have, as of the Effective Date, resolved their liability to the United States for the Work and Future Response Costs.

c. Nothing in this Settlement Agreement precludes the United States or Respondents from asserting any claims, causes of action, or demands for indemnification, contribution, or cost recovery against any person not a party to this Settlement Agreement. Nothing herein diminishes the right of the United States, pursuant to Section 113(f)(2) and (3), 42 U.S.C. § 9613(f)(2) and (3),

to pursue any such persons to obtain additional response costs or response action, and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

XXIV. INDEMNIFICATION

85. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Settlement Agreement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

86. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

87. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site.

XXV. INSURANCE

88. At least 30 days prior to commencing any On-Site Work under this Settlement Agreement, Respondents or Respondents' contractor shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of \$3,000,000.00, combined single limit, naming the United States as an additional insured. Within the same period, Respondents shall provide U.S. EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of

worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement Agreement. If Respondents demonstrate by evidence satisfactory to U.S. EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

89. Within 30 days after the Effective Date, Respondents shall establish and maintain financial security for the benefit of U.S. EPA in the amount of \$ 2,000,000.00 in one or more of the following forms, in order to secure the full and final completion of Work by Respondents:

- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of U.S. EPA, issued by financial institution(s) acceptable in all respects to U.S. EPA equaling the total estimated cost of the Work;
- c. a trust fund administered by a trustee acceptable in all respects to U.S. EPA;
- d. a policy of insurance that (i) which ensures the payment and/or performance of the Work and provides EPA with rights as a beneficiary thereof; and (ii) is issued by an insurance carrier (a) that is eligible to issue insurance policies in the applicable jurisdiction, and (b) whose insurance operations are regulated or examined by a federal or state agency;
- e. a corporate guarantee to perform the Work provided by one or more parent corporations or subsidiaries of Respondents, or by one or more unrelated corporations that have a substantial business relationship with at least one of Respondents; including a demonstration that any such company satisfied the financial test requirements of 40 C.F.R. § 264.143(f);
- f. a corporate guarantee to perform the Work by one or more of Respondents, including a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. § 264.143(f); and/or
- g. any other financial mechanism acceptable to and approved by U.S. EPA

90. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to U.S. EPA, determined in U.S. EPA's sole discretion. In the event that U.S. EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are

inadequate, Respondents shall, within 30 days of receipt of notice of U.S. EPA's determination, obtain and present to U.S. EPA for approval one of the other forms of financial assurance listed in Paragraph 89, above. In addition, if at any time U.S. EPA notifies Respondents that the anticipated cost of completing the Work has significantly increased above the current estimate of \$2,000,000.00, then, within 30 days of such notification, Respondents shall obtain and present to U.S. EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

91. If Respondents seek to ensure completion of the Work through a guarantee pursuant to Subparagraph 89.e. or 89.f. of this Settlement Agreement, Respondents shall (i) demonstrate to U.S. EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. § 264.143(f); and (ii) resubmit sworn statements conveying the information required by 40 C.F.R. § 264.143(f) annually, on the anniversary of the Effective Date, to U.S. EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. § 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the current cost estimate of \$2,000,000.00 for the Work at the Site shall be used in relevant financial test calculations.

92. If, after the Effective Date, Respondents can show that the estimated cost to complete the remaining Work had diminished below the amount set forth in Paragraph 89 of this Section, Respondents may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondents shall submit a proposal for such reduction to U.S. EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from U.S. EPA. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution) and may reduce the amount of security in accordance with U.S. EPA's written decision resolving the dispute.

93. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by U.S. EPA, provided that U.S. EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondents may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

94. If Respondents receive written notice from U.S. EPA in accordance with Paragraph 102 of this Settlement Agreement, or if EPA otherwise so notifies Respondents in writing, Respondents may thereafter release, cancel or discontinue the financial assurance instrument(s) provided pursuant to this Section. Upon the request of a Respondent, U.S. EPA will execute any documents, to the extent they are in a form acceptable to U.S. EPA, confirming that the financial assurance instrument may be released, cancelled, or discontinued to the extent required or requested by the issuer of the financial assurance instrument.

XXVII. SEVERABILITY/INTEGRATION/APPENDICES

95. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondents have sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondents shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

96. This Settlement Agreement, including its appendices, and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

"Appendix A" is the SOW.

"Appendix B" is the map of the Site.

XXVIII. ADMINISTRATIVE RECORD

97. U.S. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to U.S. EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of U.S. EPA, Respondents shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Upon request of U.S. EPA, Respondents shall additionally submit any previous studies conducted under state, local or other federal authorities relating to selection of the response action, and all communications between Respondents and state, local or other federal authorities concerning selection of the response action. At U.S. EPA's discretion, Respondents shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXIX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

98. This Settlement Agreement shall be effective 7 days after the Settlement Agreement is signed by the Director of the Superfund Division or his/her delegate.

99. This Settlement Agreement may be amended by mutual agreement of U.S. EPA and Respondents. Amendments shall be in writing and shall be effective when signed by U.S. EPA. U.S. EPA Project Coordinators do not have the authority to sign amendments to the Settlement Agreement.

100. No informal advice, guidance, suggestion, or comment by the U.S. EPA Project Coordinator or other U.S. EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXX. NOTICE OF COMPLETION OF WORK

101. When U.S. EPA determines, that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to payment of Future Response Costs and record retention, U.S. EPA will provide written notice to Respondents. If U.S. EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, U.S. EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Planning Documents or other work plan if appropriate in order to correct such deficiencies. Respondents shall implement the modified and approved RI/FS Planning Documents or other approved work plan and shall submit the required deliverable(s) in accordance with the U.S. EPA notice. Failure by Respondents to implement the approved modified RI/FS Planning Documents or other work plan shall be a violation of this Settlement Agreement.


XXXI. TERMINATION AND SATISFACTION

102. This Settlement Agreement shall terminate when Respondents demonstrate in writing and certify to the satisfaction of U.S. EPA that all activities required under this Settlement Agreement, including any additional work required by U.S. EPA under this Settlement Agreement have been performed and payment of Future Response Costs, and any stipulated penalties demanded by U.S. EPA has been made in full and U.S. EPA has approved the certification. Such certification shall not, however, terminate Respondent's obligation to comply with the record retention requirements of Section XIV of this Settlement Agreement.

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 4th day of April, 2014.

For Respondent Allied Waste Transportation, Inc.

Signature: 

Name: Tim M. Benter

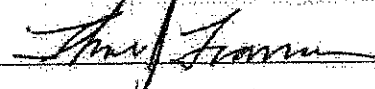
Title: Vice President

Address: 18500 N. Allied Way, Phoenix, AZ 85054

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 15 day of April, 2014.

For Respondent American Chemical Service, Inc.

Signature: 

Name: Thomas J. Froman

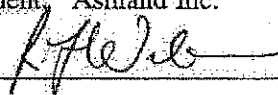
Title: Exec. Vice-President of American Chemical Service, Inc.

Address: P.O. Box 190, 420 S. Colfax Ave. Griffith, IN 46319

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 16th day of April, 2014.

For Respondent: Ashland Inc.

Signature: 

Name: Richmond L. Williams

Title: Chief Counsel, Environmental Litigation

Address: 500 Hercules Road
Research Center - Building 8139
Wilmington, DE 19808

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 15 day of April, 2014.

For Respondent ATLANTIC RICHFIELD COMPANY

Signature: Adm Fiedler

Name: Andrew Fiedler

Title: PRESIDENT ATLANTIC RICHFIELD Co.

Address: _____

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 4th day of April, 2014.

For Respondent BFI Waste Systems of North America, LLC

Signature: 

Name: Tim M. Benter

Title: Vice President

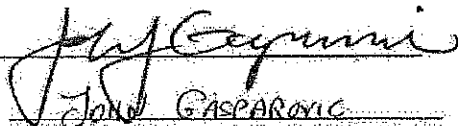
Address: 18500 N. Allied Way, Phoenix, AZ 85054

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 10th day of APRIL, 2014.

For Respondent BORGWARNER TRANSMISSION SYSTEMS, INC.

Signature:



Name:

JOHN GASPAROVIC

Title:

VICE PRESIDENT & SECRETARY

Address:

3850 HAMLIN ROAD, AUBURN HILLS, MI 48326

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 15 day of April, 2014.

For Respondent BP PRODUCTS NORTH AMERICA INC.

Signature: Andrew Fiedler

Name: Andrew Fiedler

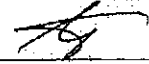
Title: Vice President - BP Products N.A.

Address: _____

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 10th day of April, 2014.

For Respondent BRANDENBURG INDUSTRIAL SERVICE COMPANY

Signature: 

Name: THOMAS J. LITTLE

Title: PRESIDENT

Address: 501 W. LAKE ST., SUITE 104, ELTHURST, IL 60126

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 12th day of APRIL, 2014.

For Respondent Du Pont Company - E. I. du Pont de Nemours
and Company

Signature: Bernard J. Reilly

Name: Bernard J. Reilly

Title: Corporate Counsel

Address: Du Pont - Legal - D 7082
1007 Market STREET
WILMINGTON, DE 19898

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 4th day of April, 2014.

For Respondent Evergreen Scavenger Service, L.L.C.

Signature: 

Name: Tim M. Benter


Title: Vice President

Address: 18500 N. Allied Way, Phoenix, AZ 85054

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 14th day of April, 2014.

For Respondent Georgia-Pacific LLC

Signature: 

Name: Roger J. Hilarides

Title: Senior Vice President – Compliance & Ethics

Address: 133 Peachtree Street, NE
GA030-09
Atlanta, Georgia 30303

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 4th day of April, 2014.

For Respondent Ylliana Disposal Partnership

Signature: 

Name: Tim M. Benter

Title: Vice President of the General Partners

Address: 18500 N. Allied Way, Phoenix, AZ 85054

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 10th day of April, 2014.

For Respondent 3M

Signature: R. A. Paschke

Name: Robert A. Paschke

Title: Manager, Corp. Env. Programs

Address: 3M Center, Bldg 224-5W-17, St. Paul, MN 55144-10000

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 4th day of April, 2014.

For Respondent Republic Services of Indiana, Limited Partnership

Signature: 

Name: Tim M. Benter

Title: Vice President of the General Partner

Address: 18500 N. Allied Way, Phoenix, AZ 85054

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 11 day of APRIL, 2014.

For Respondent UNION CARBIDE CORP.

Signature: [Handwritten Signature]

Name: ROBERT L. CASSELLER JR

Title: AUTHORIZED REPRESENTATIVE

Address: 3100 STATE ROAD
CROYDON, PA 19021

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 14th day of April, 2014.

For Respondent Union Tank Car Company

Signature: [Signature]

Name: Jeremy DeLacerda


Title: General Manager - MBU

Address: 6325 Hwy 1 North
Alexandria, LA 71303

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 11th day of April, 2014.

For Respondent United States Steel Corporation

Signature: 

Name: David L. Smiga

Title: Assistant General Counsel - Environmental

Address: 600 Grant Street, Suite 1500
Pittsburgh, PA 15219

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 10th day of April, 2014.

For Respondent Legacy Vulcan Corp.

Signature: Michael R. Mills

Name: Michael R. Mills


Title: Senior Vice President, General Counsel, & Assistant Secretary

Address: 1200 Urban Center Drive
Birmingham, AL 35242

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 4th day of April, 2014.

For Respondent Wastehaul, Inc.

Signature: 

Name: Tim M. Benter

Title: Vice President

Address: 18500 N. Allied Way, Phoenix, AZ 85054

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the Gary Development Landfill Superfund Site.

Agreed this 14 day of April, 2014.

For Respondent Waste Management of Indiana, L.L.C.

Signature: [Signature]

Name: James C. Fournier

Title: Area Director - CSN/Ca

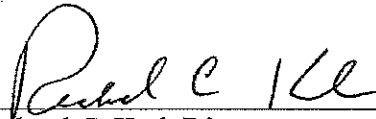
Address: Waste Management
3893 Okemos Road, Suite B4
Okemos, MI 48864

IN THE MATTER OF:

Gary Development Landfill Superfund Site
Gary, Lake County, Indiana

It is so ORDERED AND AGREED this 5TH day of MAY, 2014.

BY: _____


Richard C. Karl, Director
Superfund Division
U.S. Environmental Protection Agency
Region 5

Enclosure 4

Statement of Work

STATEMENT OF WORK
FOR A REMEDIAL INVESTIGATION AND FEASIBILITY STUDY
AT THE GARY DEVELOPMENT LANDFILL SITE
GARY, LAKE COUNTY, INDIANA

I. PURPOSE

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study (RI/FS) at the Gary Development Landfill Site in Gary, Indiana (Site). The Site includes the property located at 479 North Cline Avenue in Gary, Indiana and any nearby areas where hazardous substances, pollutants or contaminants from the property or from former operations at the property have or may have come to be located. The RI Report shall adequately evaluate the nature and extent of hazardous substances, pollutants or contaminants at and/or from the Site. The RI Report shall also assess the risk which these hazardous substances, pollutants or contaminants present for human health and the environment. The RI Report shall provide sufficient data to develop and evaluate effective remedial alternatives. The FS Report shall evaluate alternatives for addressing the impact to human health and the environment from hazardous substances, pollutants or contaminants at the Site.

The Respondents shall prepare and complete the RI and FS Reports in compliance with the Administrative Settlement Agreement and Order on Consent (AOC), SOW, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 C.F.R. Part 300) as amended and all requirements and guidance for RI/FS studies and reports, including but not limited to the United States Environmental Protection Agency (U.S. EPA) Superfund Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA (EPA/540/G-89/004, October 1988) (RI/FS Guidance), and any other guidance that U.S. EPA uses in conducting or submitting deliverables for a RI/FS. Exhibit B sets forth a partial list of guidance used by U.S. EPA for a RI/FS. U.S. EPA and the Respondents acknowledge that conditions at the site may warrant application of the U.S. EPA guidance, "Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites, February 1991" and/or U.S. EPA Presumptive Remedy guidance documents. Prior to use of the Presumptive Remedy guidance and/or the February 1991 guidance, the Respondents shall submit, for U.S. EPA's approval, a petition justifying the application of either or both the Presumptive Remedy guidance and/or the February 1991 guidance documents in the planning and implementation of work under this SOW.

The Respondents shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RI/FS at the Site, except as otherwise specified herein.

APPENDIX A

II. DOCUMENT REVIEW

The Respondents shall submit all documents or deliverables required as part of this SOW to the U.S. EPA, with a copy to the Indiana Department of Environmental Management (IDEM), for review and approval by U.S. EPA. After review of any plan, report or other item which is required to be submitted for approval pursuant to this AOC, U.S. EPA, after reasonable opportunity for review and comment by IDEM, may: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, U.S. EPA will not modify a submission without first providing Respondents at least one notice of deficiency and opportunity to cure within 30 days. (See Section X of the AOC for procedures concerning U.S. EPA Approval of Plans and Other Submissions)

III. SCOPE

Respondents shall complete the following tasks as part of this RI/FS:

- Task 1: Project Scoping and RI/FS Planning Documents
- ~~Task 2: Community Relations~~
- Task 3: Site Characterization
- Task 4: Remedial Investigation Report
- Task 5: Treatability Studies
- Task 6: Development and Screening of Alternatives (Technical Memorandum)
- Task 7: Detailed Analysis of Alternatives (FS Report)
- Task 8: Progress Reports

TASK 1: PROJECT SCOPING AND RI/FS PLANNING DOCUMENTS

1.1. Site Background

The Respondents shall gather and analyze the existing Site background information and shall conduct a Site visit to assist in planning the scope of the RI/FS.

1.1.1. Collect and Analyze Existing Data

Before planning the RI/FS activities, the Respondents shall thoroughly compile and review all existing Site data. Historical laboratory analytical data (no earlier than data from 2000, assuming laboratory reports are available) shall be submitted electronically according to U.S. EPA Region 5 specifications. Older data shall be compiled and tabulated but is not likely to have enough verifiable information to meet the Region 5 electronic deliverable specifications. Existing site data includes presently available data relating to the varieties and quantities of hazardous substances, pollutants and contaminants at the Site, past disposal practices, and the results of previous sampling activities. Examples of existing information about the Site includes historical

aerial photographs, inspection reports, Site Reassessment Report (revised June 2006), Expanded Site Inspection Report (November 2009), HRS Scoring Package (March 2011), and additional information submitted to U.S. EPA by others.

1.1.2. Conduct Site Visit

The Respondents shall visit the Site during the project scoping phase to develop a better understanding of the Site, and focus on the sources and the areas of contamination, as well as potential exposure pathways and receptors at the Site. During the Site visit, the Respondents shall observe, to the extent possible, the site's physiographic, hydrology, geology, and demographics, as well as natural resource, ecological and cultural features. The Respondents shall coordinate this visit with the U.S. EPA Remedial Project Manager (RPM).

1.2. RI/FS Planning Documents (Work Plan/Field Sampling Plan/QAPP)

1.2.1. General Requirements

Within 90 calendar days after the effective date of the AOC, the Respondents shall submit draft RI/FS Planning Documents (including the Work Plan/Field Sampling Plan, Quality Assurance Project Plan, and Health and Safety Plan) to U.S. EPA, with a copy to IDEM, for review and approval by U.S. EPA.

The objective of the RI/FS Planning Documents is to develop an RI/FS strategy and general management plan that accomplishes the following:

- A remedial investigation that adequately determines the nature and extent of the release or threatened release of hazardous substances, pollutants, or contaminants at and from the Site. In performing this investigation, the Respondents shall gather sufficient data, samples, and other information to adequately characterize the nature and extent of the contamination at the Site, to support the human health and ecological risk assessments, and to provide sufficient data for the identification and evaluation of remedial alternatives for this Site.
- A feasibility study that identifies and evaluates alternatives for remedial action to protect human health and the environment by preventing, eliminating, controlling or mitigating the release or threatened release of hazardous substances, pollutants, or contaminants at and from the Site.

When scoping the specific aspects of the project, the Respondents shall meet with U.S. EPA, with an invitation to IDEM to participate, to discuss all significant project planning decisions and special concerns associated with the Site.

The RI/FS Planning Documents shall include a detailed description of the tasks the Respondents shall perform, the information needed for each task, a detailed description of the information the Respondents shall produce during and at the conclusion of each task, and a description of the work products that the Respondents shall submit to U.S. EPA and IDEM. This includes the

deliverables set forth in this SOW; a schedule for each of the required activities consistent with the RI/FS Guidance and other relevant guidance; and a project management plan including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, requirements for submittal of electronic data, data format and backup data management), monthly reports to U.S. EPA and the state agency, and meetings and presentations to U.S. EPA and the state agency at the conclusion of each major phase of the RI/FS. The Respondents shall refer to Appendix B of the RI/FS Guidance for a description of the required contents of the RI/FS Planning Documents.

The RI/FS Planning Documents shall include the preliminary objectives for the remedial action at the Site; preliminary potential state and federal ARARs (chemical-specific, location-specific and action-specific); a description of the Site management strategy developed by the Respondents and U.S. EPA during scoping; a preliminary identification of remedial alternatives; and data needs for adequately characterizing the nature and extent of the contamination at the site, evaluating risks and developing and evaluating remedial alternatives. The RI/FS Planning Documents shall reflect coordination with treatability study requirements, if any. The RI/FS Planning Documents shall also include a process for and manner of refining and/or identifying additional Federal and State ARARs, and for preparing the human health and ecological risk assessments and the feasibility study.

1.2.2. Specific Requirements

The Respondents shall prepare the RI/FS Planning Documents as described in "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA," October, 1988, and/or other guidance documents as appropriate and approved by U.S. EPA, and shall include:

1.2.2.1. Site Background

The Site Background section shall include a brief summary of the Site location, description, physiographic, hydrology, geology, demographics, ecological, cultural and natural resource features, Site history, description of previous investigations and responses conducted at the Site by local, state, federal, or private parties, and Site data evaluations and project planning completed during the scoping process.

The Site background section shall discuss areas of waste handling and disposal activities, the locations of existing groundwater monitoring wells, if any, and previous surface water, sediment, soil, groundwater, and air sampling locations. The Site Background section shall include a summary description of available data and identify areas where hazardous substances, pollutants or contaminants were detected and the detected levels. This includes, but may not be limited to, the data in previous site inspection reports, Site Reassessment Report (revised June 2006), Expanded Site Inspection Report (November 2009), HRS Scoring Package (March 2011), and additional information submitted to U.S. EPA by other parties. The Site Background section shall include tables displaying the minimum and maximum levels of detected hazardous substances, pollutants or contaminants in Site areas and media.

1.2.2.2. Work Plan/Field Sampling Plan

Respondents shall prepare the Work Plan/Field Sampling Plan (FSP) portion of the RI/FS Planning Documents to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet the Site-specific Data Quality Objectives as established in the Quality Assurance Project Plan (QAPP) and FSP. All sampling and analyses performed shall conform to U.S. EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures.

The Respondents shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with U.S. EPA guidance.

Upon request by U.S. EPA, the Respondents shall have such a laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. The Respondents shall provide U.S. EPA with the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. The Respondents shall also ensure the provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites.

Upon request by U.S. EPA, the Respondents shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by the Respondents or their contractors or agents. The Respondents shall notify U.S. EPA not less than 10 business days in advance of any sample collection activity. U.S. EPA shall have the right to take any additional samples that it deems necessary.

1.2.2.3. Data Gap Description/Data Acquisition

As part of the FSP, the Respondents shall analyze the currently available data. The Respondents shall identify those areas of the Site and nearby areas that require data and evaluation in order to define the extent of hazardous substances, pollutants or contaminants. This Section of the FSP shall include a description of the number, types, and locations of samples to be collected. The FSP shall include an environmental program to accomplish the following:

- Conduct Site Reconnaissance. The Respondents shall conduct, as appropriate:
 - Site surveys including property, boundary, utility rights-of-way, and topographic information
 - Land Survey
 - Topographic Mapping
 - Field Screening
- Conduct Geological Investigations (Soils and Sediments). The Respondents shall conduct geological investigations to determine the extent of hazardous substances, pollutants or contaminants in surface soils, subsurface soils and sediments at the Site. As part of this geological investigation Respondents shall, as appropriate:

- Collect Surface Soil Samples
- Collect Subsurface Soil Samples
- Perform Soil Boring and Permeability Sampling
- Collect Sediments Samples
- Survey Soil Gases
- Test Pit
- Identify real-world horizontal, vertical, and elevation coordinates for all samples and site features in accordance with U.S. EPA Region 5 electronic data requirements
- Air Investigations. The Respondents shall, conduct air investigations to determine the extent of atmospheric hazardous substances, pollutants or contaminants at and from the Site, which shall include, as appropriate:
 - Collect Air Samples
 - Establish Air Monitoring Station
- Hydrogeological Investigations (Ground Water). The Respondents shall conduct hydrogeological investigations of ground water to determine the horizontal and vertical distribution of hazardous substances, pollutants or contaminants in the groundwater and the extent, fate and transport of any groundwater plumes containing hazardous substances, pollutants or contaminants. The hydrogeological investigation shall include, as appropriate:
 - Install Well Systems
 - Collect Samples from Upgradient, Downgradient, Private and Municipal wells
 - Collect Samples During Drilling (e.g., HydroPunch or Equivalent)
 - Perform Hydraulic Tests (such as Pump Tests, Slug Tests, borehole tracer tests, and Grain Size Analyses)
 - Measure Ground-Water Elevations and determine horizontal and vertical sample locations in accordance with U.S. EPA Region 5 electronic data requirements
 - Modeling
 - Determine the direction of regional and local groundwater flow
 - Identify the local uses of groundwater including the number, location, depth and use of nearby private and municipal wells
- Conduct Hydrogeological Investigations (Surface Water). The Respondents shall conduct hydrogeological investigations to determine the nature and extent of contamination of surface water from the Site. The hydrogeological investigation shall include, as appropriate:
 - Collect Samples
 - Measure Surface-Water Elevation and Depth
 - Evaluate Flow and Hydrodynamics
- Conduct Waste Investigation. The Respondents shall characterize the waste materials at the Site. Respondent shall conduct the following activities, as appropriate, as part of these waste investigations.
 - Collect Samples (Gas, Liquid, Solid)
 - Dispose of Derived Waste (Gas, Liquid, Solid)

- Conduct Geophysical Investigation. The Respondents shall conduct geophysical investigations to delineate waste depths, thicknesses and volume; the elevations of the underlying natural soil layer and the extent of cover over fill areas including the following, as appropriate:
 - Magnetometer
 - Electromagnetic
 - Ground-Penetrating Radar
 - Seismic Refraction
 - Resistivity
 - Site Meteorology
 - Cone Penetrometer Survey
 - Remote Sensor Survey
 - Radiological Investigation
 - Test Pits, trenches and soil borings
- Conduct Ecological Investigation. The Respondents shall conduct ecological investigations to assess the impact to aquatic and terrestrial ecosystems from the disposal, release and migration of hazardous substances, pollutants or contaminants at the Site including, as appropriate:
 - Wetland and Habitat Delineation
 - Wildlife Observations
 - Community Characterization
 - Endangered Species Identification
 - Biota Sampling and Population Studies
- Collect Contaminated Building Samples. The Respondents shall collect contaminated building samples, as appropriate.
- Dispose of Investigation-Derived Waste. The Respondents shall characterize and dispose of investigation-derived wastes in accordance with local, state, and federal regulations as specified in the FSP (see the Fact Sheet, Guide to Management of Investigation-Derived Wastes, 9345.3-03FS (January 1992)).
- Evaluate and Document the Need for Treatability Studies. If the Respondents or U.S. EPA identify remedial actions that involve treatment, the Respondents shall include treatability studies as outlined in Task 5 of this SOW unless the Respondents satisfactorily demonstrate to U.S. EPA that such studies are not needed. If treatability studies are needed, the Respondents shall plan initial treatability testing activities (such as research and study design) to occur concurrently with Site characterization activities.

1.2.2.4. Quality Assurance Project Plan (QAPP)

The Respondents shall prepare a QAPP that is site specific and covers sample analysis and data handling for samples collected during the RI, based on the AOC and guidance provided by U.S. EPA. The Respondents shall prepare the QAPP in accordance with "EPA Requirements of

Quality Assurance Project Plans (QA/R-5)" (EPA/240/B-01/003, March 2001) and "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-02/009, December 2002) and the Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP) Manual (EPA/505/B-04/900A, March 2005) or equivalent documentation as determined by EPA. The QAPP may include Field-Based Analytical Methods, if appropriate and scientifically defensible. The Respondents shall demonstrate, in advance to U.S. EPA's satisfaction, that each laboratory it may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media sampled within detection and quantification limits consistent with both QA/QC procedures and data quality objectives (DQO) approved in the QAPP for the Site by U.S. EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by U.S. EPA shall be used. The Respondents shall only use laboratories which have a documented Quality Assurance Program which complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995) and "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01-002, March 2001) or equivalent documentation as determined by U.S. EPA.

Upon request by U.S. EPA, the Respondents shall have their laboratory analyze samples submitted by U.S. EPA for quality assurance monitoring. The Respondents shall provide U.S. EPA with the QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis. The Respondents shall also ensure the provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, "Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites."

The Respondents shall participate in a pre-QAPP meeting or conference call with U.S. EPA, if requested by U.S. EPA. The purpose of this meeting or conference call is to discuss QAPP requirements and obtain any clarification needed to prepare the QAPP.

1.2.2.4. Health and Safety Plan

The Respondents shall prepare a Health and Safety Plan that conforms to its health and safety program and complies with the Occupational Safety and Health Administration (OSHA) regulations and protocols outlined in 29 C.F.R. Part 1910. The Health and Safety Plan shall be prepared in accordance with U.S. EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). The Health and Safety Plan shall include the 11 elements described in the RI/FS Guidance such as a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and Site control. U.S. EPA does not "approve" the Respondents' Health and Safety Plan, but rather U.S. EPA reviews it to ensure that all the necessary elements are included, and that the plan provides for the protection of human health and the environment, and after that review provides comments as may be necessary and appropriate. The safety plan must, at a minimum, follow the U.S. EPA's guidance document Standard Operating Safety Guides (Publication 9285.1-03, PB92-963414, June 1992).

TASK 2: COMMUNITY INVOLVEMENT SUPPORT

U.S. EPA has the responsibility of developing and implementing community involvement activities for the Site. The critical community involvement planning steps performed by U.S. EPA and the state agency include conducting community interviews and developing a Community Involvement Plan. Although implementing the Community Involvement Plan is the responsibility of U.S. EPA, the Respondents, if directed by U.S. EPA, shall assist by providing information regarding the Site's history; participating in public meetings; assisting in preparing fact sheets for distribution to the general public; or conducting other activities approved by U.S. EPA. All PRP-conducted community involvement activities shall be planned and developed in coordination with U.S. EPA.

TASK 3: SITE CHARACTERIZATION

3.1. Investigate and Define Site Physical and Biological Characteristics

The Respondents shall implement the Work Plan/Field Sampling Plan and collect data on the physical and biological characteristics of the Site and its surrounding areas including the physiography, geology, and hydrology, and specific physical characteristics. This information will be ascertained through a combination of historical data and photographic review, physical measurements, observations, and sampling efforts and will be utilized to define potential transport pathways and human ecological receptor populations. In defining the site's physical characteristics the Respondents will also obtain sufficient engineering data (such as hydraulic conductivity) for the projection of contaminant fate and transport, and development and screening of remedial action alternatives, including, if appropriate, information to assess treatment technologies.

The Respondents shall provide the RPM or the entity designated by the RPM with a paper (or PDF) copy and an electronic copy (according to U.S. EPA Region 5 format specification) of laboratory data within the monthly progress reports and in no event later than 45 days after complete laboratory data packages with results are received by the Respondents. In addition, the monthly progress reports will summarize field activities (including drilling locations, depths and field notes if requested by RPM), problems encountered, solutions to problems, and upcoming field activities.

Upon request by U.S. EPA, the Respondents shall allow U.S. EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by the Respondents or their contractors or agents. The Respondents shall notify U.S. EPA not less than 15 business days in advance of any sample collection activity. The U.S. EPA shall have the right to take any additional samples that it deems necessary.

3.2. Define Sources of Contamination

The Respondents shall locate each source of contamination. For each location, Respondents shall determine the areal extent and depth of contamination, and as appropriate sample at incremental depths on a sampling grid. Respondents shall determine the physical characteristics and chemical

constituents and their concentrations for all known and discovered sources of contamination. The Respondents shall conduct sufficient sampling to define the boundaries of the contaminant sources to the level established in the QAPP and DQOs. Defining the source of contamination shall include, as appropriate, analyzing the potential for contaminant release (e.g., long term leaching from soil), contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies.

3.3. Describe the Nature and Extent/Fate and Transport of Contamination

The Respondents shall gather information to describe the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the Respondents will utilize the information on site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondents will then implement a monitoring program, and any study program identified in the work plan or sampling plan, such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration, or potential for migration, of contaminants through the various media at site can be determined. To the extent practical such programs shall be designed using an iterative approach to maximize the efficiency and effectiveness of the data gathering activities. In addition, the Respondents shall gather data for calculations of contaminant fate and transport. This process is continued until the area and depth of contamination are known to the level of contamination established in the QAPP and DQOs.

3.3.1. Evaluate Site Characteristics

The Respondents shall analyze and evaluate the data to describe: (1) site physical and biological characteristics; (2) contaminant source characteristics; (3) nature and extent of contamination; and (4) contaminant fate and transport. Results of the site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The Respondents shall evaluate the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. If modeling is appropriate, such models shall be identified to U.S. EPA in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to U.S. EPA together with a sensitivity analysis. The RI data shall be presented electronically according to U.S. EPA Region 5 format requirements. Analysis of data collected for site characterization will meet the DQOs developed in the QAPP and stated in the FSP (or revised during the RI).

3.3.2. Baseline Human Health Risk Assessment

As an attachment to the RI Report, the Respondents shall submit a Baseline Human Health Risk Assessment Report to U.S. EPA, with a copy to IDEM, for review and approval by U.S. EPA. U.S. EPA and the Respondents acknowledge that based on the limited information currently available conditions at the site may warrant application of the U.S. EPA guidance, "Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites, February 1991" and/or U.S. EPA Presumptive Remedy guidance documents, which may not require a full baseline human health risk assessment for all or part of the Site. Prior to use of the Presumptive Remedy guidance and/or the February 1991 guidance, the Respondents shall submit for U.S. EPA's approval, a petition justifying their application in planning and implementation of work under this SOW.

The Respondents shall conduct the baseline risk assessment to determine whether site contaminants pose a current or potential risk to human health and the environment in the absence of any remedial action. The major components of the Baseline Risk Assessment include contaminant identification, exposure assessment, toxicity assessment, and human health and ecological risk characterization.

Respondents shall conduct a baseline human health risk assessment that focuses on actual and potential risks to persons coming into contact with on-site hazardous substances, pollutants or contaminants as well as risks to the nearby residential, recreational and industrial worker populations from exposure to hazardous substances, pollutants or contaminants in groundwater, soils, sediments, surface water, air, and ingestion of contaminated organisms in nearby, impacted ecosystems. The human health risk assessment shall define central tendency and reasonable maximum estimates of exposure for current land use conditions and reasonable future land use conditions. The human health risk assessment shall use data from the Site and nearby areas to identify the contaminants of concern (COC), provide an estimate of how and to what extent human receptors might be exposed to these COCs, and provide an assessment of the health effects associated with these COCs. The human health risk assessment shall project the potential risk of health problems occurring if no cleanup action is taken at the Site and/or nearby areas, and establish target action levels for COCs (carcinogenic and non-carcinogenic).

Respondents shall conduct the human health risk assessment in accordance with U.S. EPA guidance including, at a minimum: "Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A)," Interim Final (EPA-540-1-89-002)," OSWER Directive 9285.7-01A; December 1, 1989; and "Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)," Interim, (EPA 540-R-97-033), OSWER 9285.7-01D, January, 1998 or subsequently issued guidance.

As determined appropriate by U.S. EPA, the Respondents shall also conduct the human health risk assessment in accordance with the following additional guidance found in the following OSWER directives:

- 1) "Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities," OSWER Directive 9200.4-27; August, 1998,
- 2) "Implementation of the Risk Assessment Guidance for Superfund (RAGS) Volume I - Human Health Evaluation Manual, (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments) (Interim)," OSWER Directive 9285.7-01D-1; December 17, 1997,
- 3) "Soil Screening Guidance: Technical Background Document," OSWER Directive 9355.4-17A; May 1, 1996 and "Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, OSWER Directive 9355.4; March 24, 2001,
- 4) "Soil Screening Guidance: User's Guide," Publication 9355.4-23; April, 1996,
- 5) "Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities," OSWER Directive 9355.4-12; July 14, 1994,
- 6) "Guidance Manual for the Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children," Publication 9285.7-15-1; February, 1994, and associated, clarifying Short Sheets on IEUBK Model inputs; including but not limited to OSWER 9285.7-32 through 34, as listed on the OSWER lead internet site at <http://www.epa.gov/superfund/health/contaminants/lead/guidance.htm>.
- 7) "Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children," Version 0.99D, NTIS PB94-501517, 1994 or "Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children," Windows© version, 2001,
- 8) "Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual: (Part B, Development of Risk-based Preliminary Remediation Goals)," Interim, OSWER Directive 9285.7-01B; December, 1991,
- 9) "Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors," OSWER Directive 9285.6-03; March 25, 1991, and
- 10) "Exposure Factors Handbook," Volumes I, II, and III; August 1997 (EPA/600/P-95/002Fa,b,c).

Respondents shall also comply with the guidance on assessing human health risk associated with adult exposures to lead in soil as found in the following document: "Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil," December, 1996. This document may be downloaded from the Internet at the following address:
<http://www.epa.gov/superfund/pubs/rpubs.htm>.

Respondents shall also comply with the "Superfund Lead- Contaminated Residential Sites Handbook," December 2002 by the U.S. EPA Lead Sites Workgroup.

Additional applicable or relevant guidance may be used only if approved by U.S. EPA.

Respondents shall prepare the Human Health Risk Assessment Report according to the guidelines outlined below:

- Hazard Identification (sources). The Respondents shall review available information on the hazardous substances present at the site and identify the major contaminants of concern.
- Dose-Response Assessment. The Respondents shall select contaminants of concern based on their intrinsic toxicological properties.
- Conceptual Exposure/Pathway Analysis. The Respondents shall identify and analyze critical exposure pathways (e.g., drinking water). The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
- Characterization of Site and Potential Receptors. The Respondents shall identify and characterize human populations in the exposure pathways.
- Exposure Assessment. The exposure assessment will identify the magnitude of actual or potential human exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the Respondents shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the site.
- Risk Characterization. During risk characterization, Respondents shall compare chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the site are affecting or could potentially affect human health.
- Identification of Limitations/Uncertainties. The Respondents shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- Site Conceptual Model. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the Respondents shall develop a conceptual model of the site.

3.3.2. Baseline Ecological Risk Assessment

As an attachment to the RI Report, the Respondents shall submit a Baseline Ecological Risk Assessment Report to U.S. EPA, with a copy to IDEM, for review and approval by U.S. EPA. In the Ecological Risk Assessment Report, the Respondents shall evaluate and assess the risk to the environment posed by site contaminants. Respondents shall prepare the Ecological Risk Assessment Report in accordance with U.S. EPA guidance including, at a minimum: "Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments, (EPA-540-R-97-006, June 1997), OSWER Directive 9285.7-25. The June 1997 document allows for initial completion of a screening level Ecological Risk

Assessment, with options to stop at that point if warranted (Exhibit I-2). The Ecological Risk Assessment shall follow the guidelines outlined below:

- Hazard Identification (sources). The Respondents shall review available information on the hazardous substances present at the site and identify the major contaminants of concern.
- Dose-Response Assessment. The Respondents must select contaminants of concern based on their intrinsic toxicological properties.
- Conceptual Exposure/Pathway Analysis. Critical exposure pathways (e.g., surface water) shall be identified and analyzed. The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
- Characterization of Site and Potential Receptors. The Respondents shall identify and characterize environmental exposure pathways.
- Selection of Chemicals, Indicator Species, and End Points. In preparing the assessment, the Respondents will select representative chemicals, indicator species (species that are especially sensitive to environmental contaminants), and end points on which to concentrate.
- Exposure Assessment. In the exposure assessment, Respondents must identify the magnitude of actual or environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the Respondents shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the site.
- Toxicity Assessment/Ecological Effects Assessment. The toxicity and ecological effects assessment will address the types of adverse environmental effects associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity (e.g., weight of evidence for a chemical's carcinogenicity).
- Risk Characterization. During risk characterization, Respondents shall compare chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the site are affecting or could potentially affect the environment.
- Identification of Limitations/Uncertainties. The Respondents shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- Site Conceptual Model. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the Respondents shall develop a conceptual model of the site.

3.4. Current and Future Land Uses and Reuse Assessment

As an Attachment to the RI Report, Respondents shall submit a Memorandum to U.S. EPA for review and approval that evaluates the current and reasonably anticipated future land uses at the

Site. The Memorandum shall identify: 1) past uses at the site including title and lien information; 2) current uses of the site and neighboring areas; 3) the owner's plans, if any, for the Site following cleanup and any prospective purchasers; 4) applicable zoning laws and ordinance; 5) current zoning; 6) applicable local area land use plans, master plans and how they affect the site; 7) existing local restrictions on property; 8) property boundaries; 9) groundwater use determinations, wellhead protection areas, recharge areas and other areas identified in the state's Comprehensive Ground Water Protection Program; 10) Flood plains, wetland, or endangered or threatened species; and 11) utility rights of way.

If U.S. EPA, in its sole discretion, determines that a Reuse Assessment is necessary, Respondents will perform the Reuse Assessment in accordance with U.S. EPA guidance, including, but not limited to: "Reuse Assessments: A Tool To Implement The Superfund Land Use Directive, OSWER 9355.7-06P, June 4, 2001 upon request of U.S. EPA. The Reuse Assessment should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Site.

TASK 4: REMEDIAL INVESTIGATION (RI) REPORT

Within 90 calendar days following receipt of the last set of analytical data collected as part of the RI or unless otherwise approved by U.S. EPA, the Respondents shall submit to U.S. EPA, with a copy to IDEM, for review and approval by U.S. EPA, an RI Report addressing all of the Site and nearby areas. The RI Report shall be consistent with the AOC and this SOW. The RI Report shall accurately establish the site characteristics such as media contaminated, extent of contamination, and the physical boundaries of the contamination. Pursuant to this objective, the Respondents shall obtain only the essential amount of detailed data necessary to determine the key(s) contaminant(s) movement and extent of contamination. The key contaminant(s) must be selected based on persistence and mobility in the environment and the degree of hazard. The key contaminant(s) identified in the RI shall be evaluated for receptor exposure and an estimate of the key contaminant(s) level reaching human or environmental receptors must be made. The Respondents shall use existing standards and guidelines such as drinking-water standards, water-quality criteria, and other criteria accepted by the U.S. EPA as appropriate for the situation may be used to evaluate effects on human receptors who may be exposed to the key contaminant(s) above appropriate standards or guidelines. Respondents shall complete the RI Report in accordance with the following requirements:

The Respondents shall submit an RI Report to U.S. EPA for review and approval which includes the following:

- Executive Summary
- Site Background. The Respondents shall assemble and review available facts about the regional conditions and conditions specific to the site under investigation.
- Investigation (as applicable)
 - Site Reconnaissance
 - Field Investigation & Technical Approach
 - Chemical Analysis & Analytical Methods
 - Field Methodologies

- Biological
 - Surface Water
 - Sediment
 - Soil Boring
 - Soil Sampling
 - Monitoring Well Installation
 - Groundwater Sampling
 - Hydrogeological Assessment
 - Air Sampling
 - Waste Investigation
 - Geophysical Investigation
- Site Characteristics (as applicable)
 - Geology
 - Hydrogeology
 - Meteorology
 - Demographics and Land Use
 - Ecological Assessment
 - Hydrodynamics
-
- Nature and Extent of Contamination
 - Contaminant Sources
 - Contaminant Distribution and Trends
- Fate and Transport
 - Contaminant Characteristics
 - Transport Processes
 - Contaminant Migration Trends
- Human Risk Assessment
 - Hazard Identification (sources)
 - Dose-Response Assessment
 - Prepare Conceptual Exposure/Pathway Analysis
 - Characterization of Site and Potential Receptors
 - Exposure Assessment
 - Risk Characterization
 - Identification of Limitations/Uncertainties
 - Site Conceptual Model
- Ecological Risk Assessment
 - Hazard Identification (sources)
 - Dose-Response Assessment
 - Prepare Conceptual Exposure/Pathway Analysis
 - Characterization of Site and Potential Receptors
 - Selection of Chemicals, Indicator Species, and End Points
 - Exposure Assessment

- Toxicity Assessment/Ecological Effects Assessment
 - Risk Characterization
 - Identification of Limitations/Uncertainties
 - Site Conceptual Model
- Remedial Action Objectives
 - Summary and Conclusions

TASK 5: TREATABILITY STUDIES

If U.S. EPA determines, or the Respondents determine and U.S. EPA approves, that treatability testing is necessary, the Respondents shall conduct treatability studies as described in this Task 5 of this SOW. In addition, if applicable, the Respondents shall use the testing results and operating conditions in the detailed design of the selected remedial technology. The Respondents shall perform the following activities.

5.1. Determine Candidate Technologies and of the Need for Testing

The Respondents shall submit a Candidate Technologies and Testing Needs Technical Memorandum, to U.S. EPA, with a copy to IDEM, for review and approval by U.S. EPA, that identifies candidate technologies for a treatability studies program no later than at the time of submittal of the draft RI Report. The list of candidate technologies shall cover the range of technologies required for alternatives analysis. The Respondents shall determine and refine the specific data requirements for the testing program during Site characterization and the development and screening of remedial alternatives.

5.1.1. Conduct Literature Survey and Determine the Need for Treatability Testing

Within the Candidate Technologies and Testing Needs Technical Memorandum, the Respondents shall conduct a literature survey to gather information on the performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. Respondents shall conduct treatability studies except where Respondents can demonstrate to U.S. EPA's satisfaction that they are not needed.

5.2. Treatability Testing and Deliverables

5.2.1. Treatability Testing Work Plan and Sampling and Analysis Plan (SAP)

If U.S. EPA determines that treatability testing is necessary, the Respondents shall propose to U.S. EPA the type of treatability testing to use (e.g., bench versus pilot). However, EPA reserves the right to direct the Respondents to perform treatability testing it determines to be appropriate and necessary. Within 45 days of a request of U.S. EPA, the Respondents shall submit a Treatability Testing Work Plan and a SAP, or amendments to the original RI/FS Work Plan, FSP and QAPP to U.S. EPA, with a copy to IDEM, for review and approval by U.S. EPA, that describes the Site background, the remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance,

analytical methods, data management and analysis, health and safety, and residual waste management. The Respondents shall document the DQOs for treatability testing as well.

If pilot scale treatability testing is to be performed, the Treatability Study Work Plan shall describe pilot plant or testing installation and start-up, pilot plant or testing operation and maintenance procedures, operating conditions to be tested, a sampling plan to determine pilot plant or testing performance, and a detailed health and safety plan (or amendment to existing health and safety plan). If testing is to be performed off-Site, the plans shall address all permitting requirements. The requirements of SAPs are outlined in Task 1.2.2 of this SOW.

5.2.2. Treatability Study Health and Safety Plan

If the original Health and Safety Plan is not adequate for defining the activities to be performed during the treatability tests, the Respondents shall submit a separate or amended Health and Safety Plan. Task 1.2.2 of this SOW provides additional information on the requirements of the Health and Safety Plan. U.S. EPA reviews, but does not "approve" the Treatability Study Health and Safety Plan.

5.2.3. Treatability Study Evaluation Report

Following the completion of the treatability testing, the Respondents shall analyze and interpret the testing results in a technical report to U.S. EPA and IDEM. Respondents shall submit the treatability study report according to the schedule in the Treatability Study Work Plan.

This report may be a part of the Site Characterization Technical Memorandum, the RI Report or submitted as a separate deliverable. The Treatability Study Evaluation Report shall evaluate each technology's effectiveness; implement ability and estimated cost, and actual results as compared with predicted results. The report shall also evaluate the potential for full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 6: DEVELOPMENT AND SCREENING OF ALTERNATIVES (Technical Memorandum)

The Respondents shall develop and screen an appropriate range of remedial alternatives that will be evaluated by the Respondents. This range of alternatives shall include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative. The Respondents shall perform the following activities as a function of the development and screening of remedial alternatives.

6.1. Alternatives Development and Screening Deliverables

The Respondents shall develop and screen alternatives. Remedial action objectives will be prepared as a section of the RI Report. Unless otherwise agreed to, the Respondents shall prepare

and submit to U.S. EPA an Alternative Screening Technical Memorandum and a Comparative Analysis of Alternatives Memorandum.

6.1.1. Remedial Action Objectives Technical Memorandum

The Respondents shall include a section on Remedial Action Objectives in the RI for review and approval by U.S. EPA. Based on the baseline human health and ecological risk assessments, the Respondents shall document the Site-specific remedial action. The remedial action objectives shall specify the contaminants and media of concern, potential exposure pathways and receptors; and contaminant level or range of levels (at particular locations for each exposure route) that are protective of human health and the environment. Remedial action objectives shall be developed by considering the factors set forth in 40 C.F.R. § 300.430(e)(2)(i). The Respondents shall incorporate U.S. EPA's comments on the remedial action objectives in Alternative Screening Technical Memorandum.

6.1.2. Alternatives Screening Technical Memorandum

The Respondents shall submit an Alternatives Screening Technical Memorandum to U.S. EPA, with a copy to IDEM, for review and approval by U.S. EPA. The Alternatives Screening Technical Memorandum shall summarize the work performed and the results of each of the above tasks, and shall include an alternatives array summary. If required by U.S. EPA, the Respondents shall modify the alternatives array to assure that the array identifies a complete and appropriate range of viable alternatives to be considered in the detailed analysis. The Alternatives Screening Technical Memorandum shall document the methods, the rationale and the results of the alternatives screening process. The Respondents shall incorporate U.S. EPA's comments on the Alternatives Screening Technical Memorandum into the Comparative Analysis of Alternatives Technical Memorandum, if required. If the Comparative Analysis of Alternatives Technical Memorandum is not required the comments will be incorporated into the draft Feasibility Study Report including the comparative analysis of alternatives. The Respondents shall submit the Alternatives Screening Technical Memorandum within 45 calendar days after receipt of U.S. EPA's comments on the Remedial Action Objectives Technical Memorandum.

6.1.2.1. Develop General Response Actions

In the Alternatives Screening Technical Memorandum, the Respondents shall develop general response actions for each medium of interest including options such as containment, treatment, excavation, pumping, or other actions, singly or in combination, to satisfy the U.S. EPA-approved remedial action objectives.

6.1.2.2. Identify Areas or Volumes of Media

In the Alternatives Screening Technical Memorandum, the Respondents shall identify areas or volumes of media to which the general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The Respondents shall also take into account the chemical and physical characterization of the Site.

6.1.2.3. Identify, Screen, and Document Remedial Technologies

In the Alternatives Screening Technical Memorandum, the Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented at the Site. The Respondents shall refine applicable general response actions to specify remedial technology types. The Respondents shall identify technology process options for each of the technology types concurrently with the identification of such technology types or following the screening of considered technology types. The Respondents shall evaluate process options on the basis of effectiveness, implement ability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. The Respondents shall summarize and include the technology types and process options in the Alternatives Screening Technical Memorandum. Whenever practicable, the alternatives shall also consider the CERCLA preference for treatment over conventional containment or land disposal approaches.

In the Alternatives Technical Memorandum, Respondents shall provide a preliminary list of alternatives to address contaminated waste, soil, sediments, surface water, groundwater, and air contamination at the Site that shall consist of, but is not limited to, treatment technologies, removal and off-site treatment/disposal, removal and on-site disposal, and in-place containment for soils, sediments, and wastes. See 40 C.F.R. § 300.430(e)(1)-(7). The Respondents shall specify the reasons for eliminating any alternatives.

6.1.2.4. Assemble and Document Alternatives

The Respondents shall assemble the selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives shall represent a range of treatment and containment combinations that shall address either the Site or the operable unit as a whole. The Respondents shall prepare a summary of the assembled alternatives and their related ARARs for the Alternatives Screening Technical Memorandum. The Respondents shall specify the reasons for eliminating alternatives during the preliminary screening process.

6.1.2.5. Refine Alternatives

The Respondents shall refine the remedial alternatives to identify the volumes of contaminated media addressed by the proposed processes and size critical unit operations as necessary. The Respondents shall collect sufficient information for an adequate comparison of alternatives. The Respondents shall also modify the remedial action objectives for each chemical in each medium as necessary to incorporate any new human health and ecological risk assessment information presented in the Respondents' baseline human health and ecological risk assessment reports. Additionally, the Respondents shall update ARARs as the remedial alternatives are refined.

6.1.3. Conduct and Document Screening Evaluation of Each Alternative

The Respondents may perform a final screening process based on short and long term aspects of effectiveness, implement ability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for a detailed analysis. If necessary, the Respondents shall conduct the screening of alternatives to assure that only the

alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives shall include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare an Alternatives Screening Technical Memorandum that summarizes the results and reasoning employed in screening; arrays the alternatives that remain after screening; and identifies the action-specific ARARs for the alternatives that remain after screening.

TASK 7: DETAILED ANALYSIS of ALTERNATIVES (FS REPORT)

The Respondents shall conduct and present a detailed analysis of remedial alternatives to provide U.S. EPA with the information needed to select a Site remedy.

7.1. Detailed Analysis of Alternatives

The Respondents shall conduct a detailed analysis of the remedial alternatives for the Site. The detailed analysis shall include an analysis of each remedial option against each of the nine evaluation criteria set forth in 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis of all options using the same nine criteria as a basis for comparison.

7.1.1. Apply Nine Criteria and Document Analysis

The Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will protect human health and the environment and meet remedial action objectives; will comply with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment and how the alternative meets each of the remedial action objectives; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implement ability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: criteria 8 and 9 are considered after the RI/FS report has been released to the general public.) For each alternative the Respondents shall provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If the Respondents do not have direct input on criteria (8) state (or support agency) acceptance and (9) community acceptance, U.S. EPA will address these criteria.

7.1.2. Compare Alternatives Against Each Other and Document the Comparison of Alternatives

The Respondents shall perform a comparative analysis between the remedial alternatives and incorporate it into a section of the FS Report. That is, the Respondents shall compare each alternative against the other alternatives using the evaluation criteria as a basis of comparison.

U.S. EPA will identify and select the preferred alternative. Unless otherwise agreed to, the Respondents shall prepare a Comparative Analysis of Alternatives Technical Memorandum which summarizes the results of the comparative analysis and fully and satisfactorily addresses and incorporates U.S. EPA's comments on the Alternatives Screening Technical Memorandum. The Respondents shall incorporate U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum in the draft FS Report. Unless otherwise agreed, the Respondents shall submit the Comparative Analysis of Alternatives Memorandum within 60 calendar days after receipt of U.S. EPA's comments on the Alternatives Screening Technical Memorandum.

7.1.3. Alternatives Analysis for Institutional Controls

For any Alternatives that relies on Institutional Controls, Respondents shall include in the Alternatives Screening Technical Memorandum, Comparative Analysis of Alternative Technical Memorandum and Feasibility Study an evaluation of the following: 1) Overall Protection of Human Health and the Environment including what specific institutional control components will ensure that the alternative will remain protective and how these specific controls will meet remedial action objectives; 2) Compliance with ARARs; 3) Long Term Effectiveness including the adequacy and reliability of institutional controls and how long the institutional control must remain in place; 4) Short Term Effectiveness including the amount of time it will take to impose the Institutional Control; 5) Implement ability including research and documentation that the proper entities (e.g., potentially responsible parties, state, local government entities, local landowners conservation organizations) are willing to enter into any necessary agreement or restrictive covenant with the proper entities and/or that laws governing the restriction exist or allow implementation of the institutional control; 6) Cost including the cost to implement, maintain, monitor and enforce the institutional control; 7) State and Community acceptance of the Institutional Control.

7.2. Feasibility Study Report

Within 60 days after receipt of U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum, the Respondents shall prepare and submit a draft FS Report to U.S. EPA for its review pursuant to Section 2. If the Comparative Analysis of Alternatives Technical Memorandum is not required by U.S. EPA, the Respondents shall prepare and submit a draft FS Report to U.S. EPA for its review within 90 days after receipt of U.S. EPA's comments on the Alternative Screening Technical Memorandum, pursuant to Section 2. The FS report shall summarize the development and screening of the remedial alternatives and present the detailed analysis of remedial alternatives. In addition, the FS Report shall also include the information U.S. EPA will need to prepare relevant sections of the Record of Decision (ROD) for the Site [see Chapters 6 and 9 of U.S. EPA's, "A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents" (EPA 540-R-98-031, July 1999) for the information that is needed].

TASK 8: PROGRESS REPORTS

The Respondents shall submit monthly written progress reports to U.S. EPA and IDEM concerning actions undertaken pursuant to the AOC and this SOW, beginning 30 calendar days after the effective date of the AOC, until the termination of the AOC, unless otherwise directed in writing by the RPM. These reports shall include, but not be limited to, a description of all significant developments during the preceding period, including the specific work that was performed and any problems that were encountered; paper (or PDF) and electronic copies (within the progress report, or separately, formatted according to U.S. EPA specifications) and summary of the analytical data that was received during the reporting period; and the developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and actual or planned resolutions of past or anticipated problems. The monthly progress reports will summarize the field activities conducted each month including, but not limited to drilling and sample locations, depths and descriptions; boring logs; sample collection logs; field notes; problems encountered; solutions to problems; a description of any modifications to the procedures outlined in the RI/FS Work Plan, the FSP, QAPP or Health and Safety Plan, with justifications for the modifications; a summary of all data received (following data validation) during the reporting period and the analytical results; and upcoming field activities. In addition, the Respondents shall provide the RPM or the entity designated by the RPM with all laboratory data within the monthly progress reports (or submitted separately) and in no event later than 45 days after complete laboratory data packages with results are received by the Respondents.

EXHIBIT A
SCHEDULE FOR MAJOR DELIVERABLES

DELIVERABLE	DUE DATE
TASK 1.2.2 - RI/FS Planning Documents, including Work Plan/Field Sampling Plan, Quality Assurance Project Plan and Health and Safety Plan	RI/FS Planning documents due 90 calendar days after the effective date of the AOC. Final RI/FS Planning Documents due 30 days after U.S. EPA notification of deficiencies pursuant to Section II of the SOW and Section X of the AOC.
Task 2 – Community Involvement Support	To be included as a section in the monthly progress reports.
Task 3 - Site Characterization Technical Communications	To be included in the monthly Progress Reports.
TASK 4 - RI Report	Draft RI Report due 90 calendar days following receipt of the last set of analytical data collected as part of the RI. Final RI Report due 30 calendar days after receipt of U.S. EPA's notification of deficiencies pursuant to Section II of this SOW and Section X of the AOC.
TASK 5.1 - Candidate Technologies and Testing Needs Technical Memorandum	With the Draft RI Report, if needed (Task 4)
TASK 5.2.1 - Draft and Final Treatability Testing Work Plan and SAP or Amendments to the Original RI/FS Work Plan, FSP and/or QAPP.	Within 45 days of request of U.S. EPA.
TASK 5.2.2 - Draft and Final Treatability Testing Health and Safety Plan or Amendment to the Original Health and Safety Plan	Within 45 days of request of U.S. EPA.

DELIVERABLE	DUE DATE
TASK 5.2.3 - Draft and Final Treatability Study Evaluation Report	With the RI Report (Task 4), or as approved by U.S. EPA in the Final Treatability Testing Work Plan/Field Sampling Plan.
TASK 6 - Remedial Action Objectives Technical Memorandum	With the draft RI Report (Task 4).
TASK 6 - Alternatives Screening Technical Memorandum	30 calendar days after receipt of U.S. EPA's comments on the Remedial Action Objectives Technical Memorandum.
TASK 6 - Comparative Analysis of Alternatives Technical Memorandum	If required, 60 calendar days after receipt of U.S. EPA's comments on the Alternatives Screening Technical Memorandum.
Task 7 - FS Report	Draft FS Report due 60 calendar days after receipt of U.S. EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum. If the Comparative Analysis of Alternatives Technical Memorandum is not required by U.S. EPA, the Respondents shall prepare and submit a draft FS Report to U.S. EPA for its review within 90 days after receipt of U.S. EPA's comments on the Alternative Screening Technical Memorandum. Final FS Report due 30 calendar days after receipt of U.S. EPA's notification of deficiency on the draft FS Report pursuant to Section 2 of the SOW and Section X of the AOC.
TASK 8: Monthly Progress Reports	On the 15 th day of each month or the first business day after the 15 th of the month commencing 30 calendar days after the effective date of the AOC.

EXHIBIT B

PARTIAL LIST OF GUIDANCE

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process. The majority of these guidance documents, and additional applicable guidance documents, may be downloaded from the following websites:

<http://www.epa.gov/superfund/pubs.htm> (General Superfund)
<http://clu.in.org> (Site Characterization, Monitoring and Remediation)
<http://www.epa.gov/nrmrl/publications.html> (Site Characterization and Monitoring)
http://www.epa.gov/quality/qa_docs.html (Quality Assurance)
<http://www.epa.gov/superfund/programs/dfa/> (Dynamic Field Activities)
http://www.epa.gov/superfund/health/human_health.htm (Risk Assessment - Human)
<http://www.epa.gov/superfund/programs/nrd/era.htm> (Ecological Risk Assessment)
<http://www.epa.gov/superfund/health/contaminants/lead/index.htm> (Risk Assessment - Lead)
<http://www.epa.gov/ncea/> (Risk Assessment - Exposure Factors/Other)
<http://nepis.epa.gov/> (General Publications Clearinghouse)
<http://www.epa.gov/fedfac/documents/qualityassurance.htm> (UFP Manual and Examples)

1. The (revised) National Contingency Plan;
2. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9355.3-01, EPA/540/G-89/004, October 1988.
3. Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-91/001, February 1991.
4. Implementing Presumptive Remedies, U.S. EPA, Office of Emergency and Remedial Response, EPA-540-R-97-029, October 1997.
5. Presumptive Remedy for CERCLA Municipal Landfill Sites, U.S. EPA, OSWER Directive No. 9355.0-49FS, EPA-540-F-93-035, September 1993.
6. Presumptive Remedies: CERCLA Landfill Caps RI/FS Data Collection Guide, U.S. EPA, OSWER 9355.3-18FS, EPA/540/F-95/009, August 1995.
7. Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Ground Water at CERCLA Sites, OSWER 9283.1-12, EPA-540-R-96-023, October 1996.
8. Field Analytical and Site Characterization Technologies Summary of Applications, U.S. EPA, EPA-542-F-97-024, November 1997.
9. CLU-IN Hazardous Waste Clean-Up Information World Wide Web Site, U.S. EPA, EPA-542-F-99-002, February 1999.

10. Field Sampling and Analysis Technology Matrix and Reference Guide, U.S. EPA, EPA-542-F-98-013, July 1998.
11. Subsurface Characterization and Monitoring Techniques: A Desk Reference Guide, Volumes 1 and 2, U.S. EPA, EPA/625/R-93/003, May 1993.
12. Use of Airborne, Surface, and Borehole Geophysical Techniques at Contaminated Sites: A Reference Guide, U.S. EPA, EPA/625/R-92/007(a,b), September 1993.
13. Innovations in Site Characterization: Geophysical Investigation at Hazardous Waste Sites, U.S. EPA, EPA-542-R-00-003, August 2000.
14. Innovative Remediation and Site Characterization Technology Resources, U.S. EPA, OSWER, EPA-542-F-01-026b, January 2001.
15. Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells, U.S. EPA, EPA/600/4-89/034, 1991.
16. Ground Water Sampling Guidelines for Superfund and RCRA Project Managers, U.S. EPA, EPA-542-S-02-001, May 2002.
17. Ground Water Issue: Low-Flow (Minimal Drawdown) Ground- Water Sampling Procedures, U.S. EPA, EPA/540/S-95/504, April 1996.
18. Superfund Ground Water Issue: Ground Water Sampling for Metals Analysis, U.S. EPA, EPA-540-4-89-001, March 1989.
19. Resources for Strategic Site Investigation and Monitoring, U.S. EPA, OSWER, EPA-542-F-010030b, September 2001.
20. Region 5 Framework for Monitored Natural Attenuation Decisions for Groundwater, U.S. EPA Region 5, September 2000.
21. Ground Water Issue: Suggested Operating Procedures for Aquifer Pumping Tests, U.S. EPA, OSWER, EPA/540/S-93/503, February 1993.
22. Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water, U.S. EPA, EPA/600/R-98/128, September 1998.
23. Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action and Underground Storage Tank Sites, U.S. EPA, OSWER Directive 9200.4-17P, April 21, 1999.

24. Ground Water Issue: Fundamentals of Ground-Water Modeling, U.S. EPA, OSWER, EP/V540/S-92/005, April 1992.
25. Assessment Framework for Ground-Water Model Applications, U.S. EPA, OSWER Directive #9029.00, EPA-500-B-94-003, July 1994.
26. Ground-Water Modeling Compendium - Second Edition: Model Fact Sheets, Descriptions, Applications and Cost Guidelines, U.S. EPA, EPA-500-B-94-004, July 1994.
27. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, U.S. EPA, Office of Solid Waste and Emergency Response, OSWER Directive No. 9200.1-23P, U.S. EPA 540-R-98-031, July 1999.
28. Region 5 Instructions on the Preparation of a Superfund Division Quality Assurance Project Plan Based on U.S. EPA QA/R-5, Revision 0, U.S. EPA Region 5, June 2000.
29. Guidance for the Data Quality Objectives Process (QA-G-4), U.S. EPA, EPA/600/R-96/055, August 2000.
30. Guidance for Data Quality Objectives Process (QA-G-4) U.S. EPA, EPA/600/R-96/055, August 2000.
31. Guidance for the Preparation of Standard Operating Procedures (QA-G-6), U.S. EPA, EPA/240/B-01/004, March 2001.
32. U.S. EPA Requirements for Quality Management Plans (QA/R-2), U.S. EPA, EPA/240/B-01/002, March 2001.
33. U.S. EPA Requirements for QA Project Plans (QA/R-5), U.S. EPA, EPA/240/B-01/003, March 2001.
34. Guidance for Quality Assurance Project Plans (QA/G-5), U.S. EPA, EPA/600/R-98/018, February 1998.
35. Users Guide to the U.S. EPA Contract Laboratory Program, U.S. EPA, Sample Management Office, OSWER Directive No. 9240.0-OLD, January 1991.
36. Technical Guidance Document: Quality Assurance and Quality Control for Waste Containment Facilities, U.S. EPA, EPA/600/R-93/182, 1993.
37. Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part A), U.S. EPA, EPA/540/1-89/002, December 1989.

38. Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals), U.S. EPA, EPA/540/R-92/003, OSWER Publication 9285.7-01 B, December 1991.
39. Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part C - Risk Evaluation of Remedial Alternatives), U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-01 C, October, 1991.
40. Risk Assessment Guidance for Superfund - Volume I Human Health Evaluation Manual (Part D - Standardized Planning, Reporting, and Review of Superfund Risk Assessments), U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-47, December 2001.
41. Risk Assessment Guidance for Superfund: Volume III - Part A, Process for Conducting Probabilistic Risk Assessment, U.S. EPA, OSWER Publication 9285.7-45, EPA-540-R-02-002, December 2001.
42. Policy for Use of Probabilistic in Risk Assessment at the U.S. Environmental Protection Agency, U.S. EPA, Office of Research and Development, 1997.
43. Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors, U.S. EPA, OSWER Directive 9285.6-03, March 25, 1991.
44. Exposure Factors Handbook, Volumes I, II, and III, U.S. EPA, EPA/600/P-95/002Fa,b,c, August 1997.
45. Supplemental Guidance to RAGS: Calculating the Concentration Term, U.S. EPA, OSWER Publication 9285.7-081, May 1992.
46. Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, U.S. EPA, OSWER Directive 9355.4-12, EPA/540/F-94/043, July 14, 1994.
47. Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, U.S. EPA, OSWER Directive 9200.4-27, EPA/540/F-98/030, August 1998.
48. Guidance Manual for the Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children, U.S. EPA, OSWER Publication 9285.7-15-1, February 1994; and associated, Clarifying Short Sheets on IEUBK Model inputs, including but not limited to OSWER9285.7-32 through 34, as listed on the OSWER lead internet site at: <http://www.epa.gov/superfund/lead/products.htm>
49. Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children, Version 0.99D, NTIS PB94-501517, 1994 or Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children, Windows© version, 2001.

50. Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions, U.S. EPA, OSWER Directive 9355.0-30, April 22, 1991.
51. Performance of Risk Assessments in Remedial Investigation /Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs), OSWER Directive No. 9835.15, August 28, 1990.
52. Supplemental Guidance on Performing Risk Assessments in Remedial Investigation Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs), OSWER Directive No. 9835.15(a), July 2, 1991.
53. Role of Background in the CERCLA Cleanup Program, U.S. EPA, OSWER 9285.6-07P, April 26, 2002.
54. Soil Screening Guidance: User's Guide, U.S. EPA, OSWER Publication 9355.4-23, July 1996.
55. Soil Screening Guidance: Technical Background Document, U.S. EPA, EPA/540/R95/128, May 1996.
56. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (Peer Review Draft), U.S. EPA, OSWER Publication 9355.4-24, March 2001.
57. Ecological Risk Assessment Guidance for Superfund: Process for Designing & Conducting Ecological Risk Assessments, U.S. EPA, OSWER Directive 9285.7-25, EPA-540-R-97-006, February 1997.
58. Guidelines for Ecological Risk Assessment, U.S. EPA, EPA/630/R-95/002F, April 1998.
59. The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments, U.S. EPA, OSWER Publication 9345.0-14, EPA/540/F-01/014, June 2001.
60. Ecotox Thresholds, U.S. EPA, OSWER Publication 9345.0-12FSI, EPA/540/F-95/038, January 1996.
61. Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites, U.S. EPA, OSWER Directive 9285.7-28P, October 7, 1999.
62. Guidance for Data Usability in Risk Assessment (Quick Reference Fact Sheet), OSWER 9285.7-05FS, September, 1990.
63. Guidance for Data Usability in Risk Assessment (Part A), U.S. EPA, Office of Emergency and Remedial Response, Publication 9285.7-09A, April 1992.

64. Guide for Conducting Treatability Studies Under CERCLA, U.S. EPA, EPA/540/R-92/07ia, October 1992.
65. CERCLA Compliance with Other Laws Manual, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9234.1-01 and -02, EPA/V540/G-89/009, August 1988.
66. Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites, U.S. EPA, Office of Emergency and Remedial Response, (Interim Final), OSWER Directive No. 9283.1-2, EPA/540/G 88/003, December 1988.
67. Considerations in Ground- Water Remediation at Superfund Sites and RCRA Facilities -Update, U.S. EPA, OSWER Directive 9283.1-06, May 27, 1992.
68. Methods for Monitoring Pump-and-Treat Performance, U.S. EPA, EPA/600/R-94/123, June 1994.
69. Pump-and-Treat Ground- Water Remediation A Guide for Decision Makers and Practitioners, U.S. EPA, EPA/625/R-95/005, July 1996.
70. Ground- Water Treatment Technology Resource Guide, U.S. EPA, OSWER, EPA-542-B-94/009, September 1994.
71. Land Use in the CERCLA Remedy Selection Process, U.S. EPA, OSWER Directive No.9355.7-04, May 25, 1995.
72. Reuse Assessments: A Tool To Implement The Superfund Land Use Directive, U.S. EPA, OSWER 9355.7-06P, June 4, 2001.
73. Reuse of CERCLA Landfill and Containment Sites, U.S. EPA, OSWER 9375.3-05P, EPA-540-F-99-015, September 1999.
74. Reusing Superfund Sites: Commercial Use Where Waste is Left on Site, U.S. EPA, OSWER 9230.0-100, February 2002.
75. Covers for Uncontrolled Hazardous Waste Sites, U.S. EPA, EPA/540/2-85/002, 1985.
76. Technical Guidance Document: Final Covers on Hazardous Waste Landfills and Surface Impoundments, U.S. EPA, OSWER, EPA/530-SW-89-047, July 1989.
77. Engineering Bulletin: Landfill Covers, U.S. EPA, EPA/540/S-93/500, 1993.
78. Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites, U.S. EPA OSWER Directive 9285.6-08, February 12, 2002.

79. Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups, U.S. EPA, OSWER 9355.0-74FS-P, EPA/540-F-00-005, September 29, 2000.
 80. Health and Safety Requirements of Employees Employed in Field Activities, U.S. EPA, Office of Emergency and Remedial Response, U.S. EPA Order No. 1440.2, July 12, 1981.
 81. OSHA Regulations in 29 C.F.R. 1910.120, Federal Register 45654, December 19, 1986.
 82. Standard Operating Safety Guides, PB92-963414, June 1992.
 83. Community Involvement in Superfund: A Handbook, U.S. EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9230.0#3B June 1988; and OSWER Directive No. 9230.0-3C, January 1992.
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Figure 1-1

Site Location Map, Gary Development Landfill
Gary, Lake County, Indiana (U.S. EPA ID: IND077005916)



Sources:
Aerial Photography Data
 - Obtained from the State of Indiana Geographic Information Office Library
 - Approximate Site Boundary based on Lake County parcels.
 Parcel ID: 45-03-35-301-003.000-001 15.777 acres
 Parcel ID: 45-03-35-326-001.000-004 5.9 acres
 Parcel ID: 45-03-35-326-002.000-004 40 acres

(Ref. 149, pp. 1-5)

Orthorectification - Obtained from IndianaMap Framework Data
 (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83



Approximate Center of Site

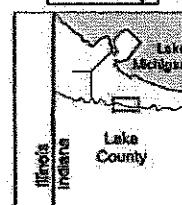
Approximate Site Boundary

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Mapped By: Mike Hill, Office of Land Quality
 Date: 2/18/2008



Site Vicinity



Lake County, IN



Enclosure 5

SBREFA Fact Sheet

U.S. EPA Small Business Resources Information Sheet

The United States Environmental Protection Agency provides an array of resources, including workshops, training sessions, hotlines, websites and guides, to help small businesses understand and comply with federal and state environmental laws. In addition to helping small businesses understand their environmental obligations and improve compliance, these resources will also help such businesses find cost-effective ways to comply through pollution prevention techniques and innovative technologies.

EPA's Small Business Websites

Small Business Environmental Homepage - www.smallbiz-enviroweb.org

Small Business Gateway - www.epa.gov/smallbusiness

EPA's Small Business Ombudsman - www.epa.gov/sbo or 1-800-368-5888

EPA's Compliance Assistance Homepage

[www.epa.gov/compliance/assistance/
business.html](http://www.epa.gov/compliance/assistance/business.html)

This page is a gateway to industry and statute-specific environmental resources, from extensive web-based information to hotlines and compliance assistance specialists.

EPA's Compliance Assistance Centers

www.assistancecenters.net

EPA's Compliance Assistance Centers provide information targeted to industries with many small businesses. They were developed in partnership with industry, universities and other federal and state agencies.

Agriculture

www.epa.gov/agriculture/

Automotive Recycling

www.ecarcenter.org

Automotive Service and Repair

www.ccar-greenlink.org or 1-888-GRN-LINK

Chemical Manufacturing

www.chemalliance.org

Construction

www.cicacenter.org or 1-734-995-4911

Education

www.campuserc.org

Food Processing

www.fpeac.org

Healthcare

www.hercenter.org

Local Government

www.lgean.org

Metal Finishing

www.nmfrc.org

Paints and Coatings

www.paintcenter.org

Printed Wiring Board Manufacturing

www.pwbrc.org

Printing

www.pneac.org

Ports

www.portcompliance.org

U.S. Border Compliance and Import/Export Issues

www.bordercenter.org

Hotlines, Helplines and Clearinghouses

www.epa.gov/epahome/hotline.htm

EPA sponsors many free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements. Some examples are:

Antimicrobial Information Hotline

info-antimicrobial@epa.gov or
1-703-308-6411

Clean Air Technology Center (CATC) Info-line

www.epa.gov/ttn/catc or 1-919-541-0800

Emergency Planning and Community Right-To-Know Act

[www.epa.gov/superfund/resources/
infocenter/epcra.htm](http://www.epa.gov/superfund/resources/infocenter/epcra.htm) or 1-800-424-9346

EPA Imported Vehicles and Engines Public Helpline

www.epa.gov/otaq/imports or
734-214-4100

National Pesticide Information Center

www.npic.orst.edu/ or 1-800-858-7378

National Response Center Hotline -

to report oil and hazardous substance spills
www.nrc.uscg.mil or 1-800-424-8802

Pollution Prevention Information Clearinghouse (PPIC)

www.epa.gov/opptintr/ppic or
1-202-566-0799

Safe Drinking Water Hotline

[www.epa.gov/safewater/hotline/index.
html](http://www.epa.gov/safewater/hotline/index.html) or 1-800-426-4791

Stratospheric Ozone Protection Hotline

www.epa.gov/ozone or 1-800-296-1996

U. S. EPA Small Business Resources

Toxic Substances Control Act (TSCA) Hotline
tsca-hotline@epa.gov or 1-202-554-1404

Wetlands Information Helpline
www.epa.gov/owow/wetlands/wetline.html or 1-800-832-7828

State and Tribal Web-Based Resources

State Resource Locators
www.envcap.org/statetools

The Locators provide state-specific contacts, regulations and resources covering the major environmental laws.

State Small Business Environmental Assistance Programs (SBEAPs)
www.smallbiz-enviroweb.org

State SBEAPs help small businesses and assistance providers understand environmental requirements and sustainable business practices through workshops, trainings and site visits. The website is a central point for sharing resources between EPA and states.

EPA's Tribal Compliance Assistance Center
www.epa.gov/tribalcompliance/index.html

The Center provides material to Tribes on environmental stewardship and regulations that might apply to tribal government operations.

EPA's Tribal Portal
www.epa.gov/tribalportal/

The Portal helps users locate tribal-related information within EPA and other federal agencies.

EPA Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations before an enforcement action has been initiated, businesses may be eligible for penalty waivers or reductions. EPA has two such policies that may apply to small businesses:

EPA's Small Business Compliance Policy
www.epa.gov/compliance/incentives/smallbusiness/index.html

This Policy offers small businesses special incentives to come into compliance voluntarily.

EPA's Audit Policy
www.epa.gov/compliance/incentives/auditing/auditpolicy.html

The Policy provides incentives to all businesses that voluntarily discover, promptly disclose and expeditiously correct their noncompliance.

Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established a SBREFA Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. If you believe that you fall within the Small Business Administration's definition of a small business (based on your North American Industry Classification System designation, number of employees or annual receipts, as defined at 13 C.F.R. 121.201; in most cases, this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities, call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247), or go to their website at www.sba.gov/ombudsman.

Every small business that is the subject of an enforcement or compliance action is entitled to comment on the Agency's actions without fear of retaliation. EPA employees are prohibited from using enforcement or any other means of retaliation against any member of the regulated community in response to comments made under SBREFA.

Your Duty to Comply

If you receive compliance assistance or submit a comment to the SBREFA Ombudsman or Regional Fairness Boards, you still have the duty to comply with the law, including providing timely responses to EPA information requests, administrative or civil complaints, other enforcement actions or communications. The assistance information and comment processes do not give you any new rights or defenses in any enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under any of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also, remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act or related provisions.

Enclosure 6

Itemized Cost Summary

Itemized Cost Summary

GARY DEVELOPMENT LANDFILL, GARY, IN SITE ID = B5 2L

Cumulative Site Expenditures Through 01/31/2017

REGIONAL PAYROLL COSTS	\$272,031.10
HEADQUARTERS PAYROLL COSTS	\$345.76
REGIONAL TRAVEL COSTS	\$38.14
AUTOMATED DATA PROCESSING	
COMPUTER SCIENCES CORPORATION (EPW10016)	\$51,992.07
EMERGENCY REMOVAL CLEANUP (ERC) CONTRACT	
FERGUSON HARBOUR INCORPORATED (68-S5-9921)	\$7,367.54
ENFORCEMENT SUPPORT SERVICES (ESS) CONTRACT	
TOEROEK ASSOCIATES INC. (EPW10011)	\$66,610.62
BOOZ ALLEN & HAMILTON (EPW11016)	\$34.22
ENVIRONMENTAL SERVICES ASSISTANCE TEAMS (ESAT)	
ALION SCIENCE AND TECHNOLOGY CORPORATION (68-W0-1014)	\$26,137.09
TECHLAW, INC. (EPW06031)	\$13,961.15
RESPONSE ACTION (RAC) CONTRACT	
SULTRAC, JV (EPS50602)	\$105,088.10
SUPERFUND COOPERATIVE AGREEMENT (SCA)	
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (V00E00994)	\$3,455.00
INDIANA DEM (V01E00994)	\$11,904.00
INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT (V02E00994)	\$2,848.00
INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT (V03E00994)	\$4,637.00
SUPERFUND TECH. ASSISTANCE & RESPONSE TEAM (START)	
TETRA TECH, INC. (EPS51301)	\$4,263.12
TECHNICAL SERVICE AND SUPPORT	
ARCTIC SLOPE REGIONAL CORP(ASRC) (68-W0-1002)	\$283.03
ASRC MANAGEMENT SERVICES, INC. (EPW05052)	\$946.86

Itemized Cost Summary

GARY DEVELOPMENT LANDFILL, GARY, IN SITE ID = B5 2L

Cumulative Site Expenditures Through 01/31/2017

COMPUTER SCIENCES CORPORATION (EPW06046)	\$2,767.17
PRIMUS SOLUTIONS, INC. (EPW11024)	\$9,123.96
CONTRACT LAB PROGRAM (CLP) COSTS	
FINANCIAL COST SUMMARY	\$59,951.89
EPA INDIRECT COSTS	\$402,015.36
TOTAL SITE COSTS BEFORE COST RECOVERY COLLECTIONS	\$1,045,801.18
COLLECTIONS/ADJUSTMENTS	(\$148,305.40)
Total Site Costs:	\$897,495.78

Enclosure 7

Site-nexus document

Illinois

Environmental Protection



2200 Churchill Road, Springfield, Illinois 62706

Agency

Telephone:

312/896-5001
33 South Stolp Avenue
Aurora, Illinois 60504

INDIANA STATE BOARD OF HEALTH
DIVISION OF POLLUTION CONTROL
MARCH 11 1977

Refer to: Cook County - 03103901 - Calumet City/CID

March 11, 1977

Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46206

Attention: Mr. John Baker
Mr. Jim Hunt

Gentlemen:

Enclosed please find a list of sixteen generators of special waste. Each of these waste streams was issued a supplemental permit by the Illinois EPA for disposal at a landfill in Calumet City - Chicago, Illinois.

For one reason or another, these waste streams are apparently being diverted to areas in Indiana for disposal, mostly to a landfill in Gary.

Mr. Robert Wengrow of this office spoke to you in late February concerning the GLD landfill in Gary. At that time, you described the condition of the landfill and also informed us that there have been only eight permits issued for the disposal of special (liquid or hazardous) wastes at this site, all of which are for companies in Indiana.

We hope that this list will be of assistance to you in your solid and special waste endeavors.

If we can be of any further assistance, please feel free to contact this office.

Sincerely,

William C. Child

William C. Child, Northern Region Manager
Land Field Operations Section
Division of Land/Noise Pollution Control

WC:RAW:jlr:1

Enclosure: List

cc: Division File
Northern Region
Dale Montgomery - FOS Manager

GENERATOR

Dreeblan Paint Co.
3729 West 49th Street
Chicago, IL

Leslie Adamski
Baron-Blakeslee Co.
1620 South Laramie Avenue
Chicago, IL 60650

Mr. John Kelly
Howell Company
410 South 1st Street
St. Charles, IL

Mr. Bob Schmidt
Hills McCanna Co.
420 Maple
Carpentersville, IL

A. F. Neumann
Benjamin Moore & Co.
North and 25th Avenues
Melrose Park, IL 60160

Mr. Joseph E. Chapp, V.P.
National Precision Circuits
2925 Lucy Lane
Franklin Park, IL 60131

Mr. Nicholas
Ansul Corp.
One Stanton Street
Marinette, WI

Mr. Stan J. Dirvin
National Can Co.
LaPorte, IN

Mr. V. L. Schad
Western Electric - Hawthorne
Works
Cicero & West Cermak Road
Cicero, IL 60623

HAULER
TYPE OF WASTE

Liquid Waste
2930 Lucy Lane
Franklin Park, IL
(Paint Washings)

" "
" "
" "
(Still Bottoms)

" "
" "
" "
(Nickel Cleaner)

" "
" "
" "
(Soluble Oils)

" "
" "
" "
(Wash Thinners)

" "
" "
" "
(Cu NH₄ Persulfate)

Conservation Chemical Unknown at Present

(Phenolic Waste)

Scrap Haulers Corp.
Riverdale, IL
(Oil & Water Wastes)

Liquid Waste, Inc.
2930 Lucy Lane
Franklin Park, IL
(Wire Mill Wastes)

Indiana
DISPOSAL SITE

Gary 45-2
IN 9-517-0000-11

G.L.D. Disposal 45-2
IN 94-17-0000-11

#45-2 Indiana Permit #SPC-17

Permit #SPC-17
IN 9517-
Site #45-2

G.L.D. Disposal Co.
IN 9517-000-11
Dis. Per. #45-2

G.L.D. Disposal
Hauling Permit #IN9517-0000-11
Disposal Permit #45-2

Various Locations
Ind. Lic. #IN-9506-0000-21

IN 9517-0000-11
Probably G.L.D.

<u>GENERATOR</u>	<u>HAULER TYPE OF WASTE</u>	<u>Indiana DISPOSAL SITE</u>
M. A. Hurlich Staley Chemical Co. Post Office Box 178 Lemont, IL 60439	Liquid Waste, Inc. 2930 Lucy Lane Franklin Park, IL (Indust. Sludge)	Gary-G.L.D. Hauling Permit - SPC-17 IN 9517-000-11 Disp. Permit 45-2
Mr. John V. Eller, V. P. H. P. Smith Paper Co. 5001 West 66th Street Chicago, IL 60638	D and J Refuse 654 East 161st St. South Holland, IL (Drum Sludge)	Midwest Solvent Recycling Corp. Gary, Indiana Ind. S.P.C.B. VEH. #721 & 722 IN 9516-000-11
Mr. Diehl Spot Nails 1100 Hicks Road Rolling Meadows, IL	Liquid Engr. Co. (Caustic Sludge)	In. Hauling Permit IN 9517-000-11 Dis. Per 45-2
Union Special Corp. 10903 Mullen Street Huntley, IL 60142 Attn: Mr. L. E. Parker, Pl. Eng.	Liquid Waste, Inc. 2930 Lucy Lane Franklin Park, IL 60131 (Soluble Oils)	? - Probably G.L.D.
Allis-Chalmers 11 Pine Lake Avenue LaPorte, IN 46350 Attn: E. A. Wacker, Pl. Eng.	General Drainage, Inc. Gary G.L.D. Gary, Indiana (Chrome Sludge)	
Delco Electronics 700 East Firmin Kokomo, Indiana Attn: Mr. Kenneth Jayne, PL. Engr.	Indiana Sanitation (Methanol & Water)	Incinerator in Northern Indiana
Danly Machine Corp. 2100 South Laramie Avenue Chicago, IL 60650 Attn: Mr. A. R. Durik	Liquid Waste 2930 Lucy Lane Franklin Park, IL (Oil & Waste Water)	G.L.D. Disposal - Gary IN 9517-0000-11 - Hauling 45-2 - Disposal